

STIC Search Report **EIC 1700**

STIC Database Tracking Number: 177255

TO: Satya Sastri

Location: REM 10A30

Art Unit: 1713 January 25, 2006

Search Notes

Case Serial Number: 10/774617

From: Les Henderson Location: EIC 1700 **REM 4B28 / 4A30**

Phone: 571-272-2538

Leslie.henderson@uspto.gov

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EIC17000

Questions about the scope or the results of the search? Contact the EIC searcher or contact:

Kathleen Fuller, ElC 1700 Team Leader 571/272-2505 REMSEN 4B28

Voluntary Results Feedback Form
 I am an examiner in Workgroup: Example: 1713 Relevant prior art found, search results used as follows:
102 rejection
103 rejection
Cited as being of interest.
Helped examiner better understand the invention.
Helped examiner better understand the state of the art in their technology.
Types of relevant prior art found: ☐ Foreign Patent(s)
 Non-Patent Literature (journal articles, conference proceedings, new product announcements etc.)
> Relevant prior art not found:
Results verified the lack of relevant prior art (helped determine patentability).
Results were not useful in determining patentability or understanding the invention.
Comments:

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Phone Mail Box and Bldg/Room Location	hyn Austri Number 30 n: 1: m / 1/2/430 Res	Examiner # : 79 & i 5 Serial Number: sults Format Preferred (circl	Date: 					
If more than one search is submitted, please prioritize searches in order of need.								
Please provide a detailed statement of the Include the elected species or structures, utility of the invention. Define any terms known. Please attach a copy of the cover	e search topic, and describe keywords, synonyms, acro s that may have a special n	e as specifically as possible the s onyms, and registry numbers, and neaning. Give examples or relev	ubject matter to be searched. I combine with the concept or					
Title of Invention: Noten - w	totening resis	tant plesine -	ensuling adhesing					
Title of Invention: With word Inventors (please provide full names):	Len Ornan	y The						
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Earliest Priority Filing Date:		· .						
For Sequence Searches Only Please incli- appropriate serial number.	ude all pertinent information	(parent, child, divisional, or issued	patent numbers) along with the					
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STAFF USE ONLY	Type of Search	**************************************	**************************************					
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Searcher Location:	Structure (#)	Questel/Orbit						
Date Searcher Picked Up:	Bibliographici	Dr.Link	·					
Date Completed: 1 / 25 / 0.6	Litigation	Lexis/Nexis						
Searcher Prep & Review Time: 120	Fulltext	Sequence Systems						
Clerical Prep Time: 30	Patent Family	Other (specify)						

PTO-1590 (8-01)

Banks, Kendra

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From:

Sastri, Satya

Sent:

Monday, January 23, 2006 12:08 PM

To:

STIC-EIC1700

Subject:

Database Search Request, Serial Number: 10774617

Requester:

SATYA SASTRI (P/1713)

Art Unit:

GROUP ART UNIT 1713

Employee Number:

79815

Office Location:

REM 10A30

Phone Number:

(571)272-1112

Mailbox Number:

Case serial number:

10774617

Class / Subclass(es):

Earliest Priority Filing Date:

Feb. 9, 2004

Format preferred for results:

Paper

Search Topic Information:

composition comprising copolymer formed from monomers recited in claim 1, 10, 23, 31 and 34. Specific examples to aid the search in claims 10 and 34 may be: ethylimidazoline methacrylate as alkylimidazoline (meth)acrylate (trade name compound: NORSOCRYL); trifluorethyl methacrylate as trifluoroalkyl (meth)acrylate (trade name MATRIFE), methyl methacrylate or styrene or hexyl methacrylate or isobutyl methacrylate or ethyl methacrylate or n-butyl methacrylate as hard monomer; 2-ethylhexyl acrylate or tert. butyl acrylate as soft monomers. Please search with generic monomers for claim 1.

Special Instructions and Other Comments:

Mon, Wed, Fridays between 10 and 4pm.

SCIENTIFIC REFERENCE BETTER SCI & Lech Inf . Cnfi

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CONFIRMATION NO. 8682

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Rib Data	Sheet	

SERIAL NUMBE 10/774,617	R	FILING DATE 02/09/2004 RULE	C	CLASS 524	GROL	JP ART 1713	UNIT	D	ATTORNEY OCKET NO. 529/JDC/A23
APPLICANTS									
Sou Phong	Sou Phong Lee, Arcadia, CA;								
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** FOREIGN APPI	LICA	TIONS ************************************	***						
IF REQUIRED, FC ** 05/06/2004	DREI	GN FILING LICENSE	GRANTE	ED					
Foreign Priority claimed 35 USC 119 (a-d) condit	tions	yes no Met aft		STATE OR	SHE	ETS	тот	AL	INDEPENDENT
met Verified and Acknowledged		Allowance	itials	COUNTRY CA	1	VING CLAIMS 48		CLAIMS 5	
ADDRESS 23363 CHRISTIE, PARKER & HALE, LLP PO BOX 7068 PASADENA, CA									
91109-7068 TITLE Water-whitening re	esist	ant pressure-sensitive	adhesive	е					
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ABSTRACT OF THE DISCLOSURE

Pressure-sensitive adhesive compositions that resist water-whitening are provided. The compositions comprise emulsion copolymers formed from a plurality of monomers that includes a plurality of (meth)acrylic monomers, at least one trifluoroalkyl (meth)acrylate monomer, and at least one alkylimidazolidone (meth)acrylate monomer. Preferably, the (meth)acrylic monomers comprise a plurality of soft monomers, at least one hard monomer and at least one acid monomer. The plurality of monomers may further include at least one aliphatic urethane di(meth)acrylate, an oligomer. The pressure-sensitive adhesive composition also comprises a surfactant system including at least one surfactant.

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WHAT IS CLAIMED IS:

- A pressure-sensitive adhesive composition comprising a copolymer formed from 1. a plurality of monomers that includes:
 - (a) a plurality of (meth)acrylic monomers;
 - (b) at least one trifluoroalkyl (meth)acrylate monomer; and
- A pressure-sensitive adhesive composition according to claim 1, wherein the 2. plurality of monomers further includes at least one aliphatic urethane di(meth)acrylate.
- 3. A pressure-sensitive adhesive composition according to claim 1, wherein the at least one trifluoroalkyl (meth)acrylate monomer comprises trifluoroethyl methacrylate.
- 4. A pressure-sensitive adhesive composition according to claim 1, wherein the at least one alkylimidazolidone (meth)acrylate monomer comprises ethylimidazolidone 15 510 L9 methacrylate.
 - A pressure-sensitive adhesive composition according to claim 2, wherein the at 5. least one aliphatic urethane di(meth)acrylate comprises an aliphatic urethane diacrylate having a molecular weight of about 5,000 g/mol.
 - A pressure-sensitive adhesive composition according to claim 1, further 6. comprising a surfactant system comprising at least one surfactant.
- 25 7. A pressure-sensitive adhesive composition according to claim 6, wherein the surfactant system comprises at least one surfactant having an ethylene oxide content of about 30 moles ethylene oxide to 1 mole surfactanta
- A pressure-sensitive adhesive composition according to claim 6, wherein the at 8. least one surfactant comprises at least one anionic surfactant and at least one nonionic surfactant. 30

	9.	A pressure-sensitive composition according to claim 1, wherein the composition
	is crosslink	ted with at least one crosslinking agent.
	10.	A pressure-sensitive adhesive composition comprising a copolymer formed from
5	a plurality	of monomers that includes:
	(a)	a plurality of soft monomers;
	(b)	at least one hard monomer;
	(c)	at least one acid monomer;
	(d)	at least one trifluoroalkyl (meth)acrylate monomer; and
10	(e)	at least one alkylimidazolidone (meth)acrylate monomer.
	11.	A pressure-sensitive adhesive composition according to claim 10, wherein the
	plurality o	f soft monomers is selected from the group consisting of alkyl acrylates having 4 to 12
		ms in the alkyl group.
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	12.	A pressure-sensitive adhesive composition according to claim 10, wherein the
	plurality o	f soft monomers comprises 2-ethylhexyl acrylate and butyl acrylate.
		150 i 38
	13	A pressure-sensitive adhesive composition according to claim 10, wherein the at
20 ,	least one h	nard monomer is selected from the group consisting of styrene, methyl methacrylate, n-
:AN	५८ hexyl met	hagrylate, ethyl methacrylate, isobutyl methacrylate, and n-butyl methacrylate.
470	165 L	49 452 LS2 LS3 (LT3)

least one hard monomer comprises styrene and methyl methacrylate. 25 A pressure-sensitive adhesive composition according to claim 10, wherein the at 15. least one acid monomer is selected from the group consisting of methacrylic acid, acrylic acid, itaconic acid and fumaric acid.

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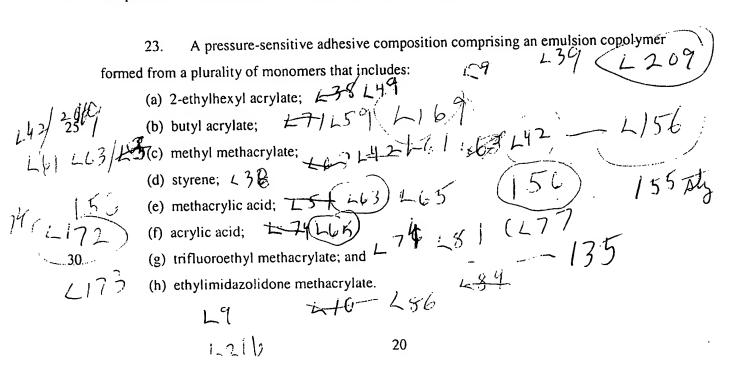
A pressure-sensitive adhesive composition according to claim 10, wherein the at 30 least one acid monomer comprises methacrylic acid and acrylic acid. 45

A pressure-sensitive adhesive composition according to claim 10, wherein the at

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17.	A pressure-sensitive adhesive composition according to claim 10, wherein the
plurality of	monomers further includes at least one aliphatic urethane di(meth)acrylate.
•	L85-L71
10	A according to claim 17, wherein the

- 18. A pressure-sensitive adhesive composition according to claim 17, wherein the at least one aliphatic urethane di(meth)acrylate comprises an aliphatic urethane diacrylate having a molecular weight of about 5,000 g/mol.
- 19. A pressure-sensitive adhesive composition according to claim 10, further
 10 comprising a surfactant system comprising at least one surfactant.
 - 20. A pressure-sensitive adhesive composition according to claim 19, wherein the surfactant system comprises at least one surfactant having an ethylene oxide content of about 30 moles ethylene oxide to 1 mole surfactant.
 - 21. A pressure-sensitive adhesive composition according to claim 19, wherein the at least one surfactant comprises at least one anionic surfactant and at least one nonionic surfactant.
- 22. A pressure-sensitive adhesive composition according to claim 10, wherein the composition is crosslinked with at least one crosslinking agent.



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- 24. A pressure-sensitive adhesive composition according to claim 23, wherein the plurality of monomers further includes at least one aliphatic urethane di(meth)acrylate.
- 5 25. A pressure-sensitive adhesive composition according to claim 24, wherein the at least one aliphatic urethane di(meth)acrylate comprises aliphatic urethane diacrylate having a molecular weight of about 5,000 g/mol.
- 26. A pressure-sensitive adhesive composition according to claim 23, further comprising a surfactant system comprising at least one surfactant.
 - 27. A pressure-sensitive adhesive composition according to claim 26, wherein the surfactant system comprises at least one surfactant having an ethylene oxide content of about 30 moles ethylene oxide to 1 mole surfactant.

28. A pressure-sensitive adhesive composition according to claim 26, wherein the at least one surfactant comprises at least one anionic surfactant and at least one nonionic surfactant.

- 29. A pressure-sensitive adhesive composition according to claim 23, wherein the plurality of monomers further includes at least one chain transfer agent.
 - 30. A pressure-sensitive adhesive composition according to claim 23, wherein the composition is crosslinked with at least one crosslinking agent.
- 25 31. A pressure-sensitive adhesive composition according to claim 23, wherein the plurality of monomers, on percent-by-weight basis, based on the total weight of monomers, consists essentially of:
 - (a) about 10% to 22% 2-ethylhexyl acrylate;
 - (b) about 58% to 70% butyl acrylate;
- 30 (c) about 3% to 8% methyl methacrylate;
 - (d) about 1% to 5% styrene;

- (e) about 2% to 5% methacrylic acid;
- (f) about 2% to 5% acrylic acid;
- (g) about 0.5% to 2.5% trifluoroethyl methacrylate; and
- (h) a positive amount up to about 1% ethylimidazolidone methacrylate.

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- 32. A pressure-sensitive adhesive composition according to claim 31, wherein the plurality of monomers further includes at least one aliphatic urethane di(meth)acrylate, in a total amount of up to about 1.6% by weight.
- 10 33. A pressure-sensitive adhesive composition according to claim 32, wherein the at least one aliphatic urethane di(meth)acrylate comprises an aliphatic urethane diacrylate having a molecular weight of about 5,000 g/mol.
- 34. A pressure-sensitive adhesive composition comprising an emulsion copolymer formed from a plurality of monomers that includes, on a percent-by-weight basis, based on the total weight of monomers:
 - (a) about 80% to 90% of a plurality of soft monomers;
 - (b) about 3% to 10% of a plurality of hard monomers;
 - (c) about 3% to 8% of a plurality of acid monomers;
 - (d) a positive amount up to about 1% of at least one alkylimidazolidone (meth)acrylate monomer; and
 - (e) about 0.5% to 2.5% of at least one trifluoroalkyl (meth)acrylate monomer.
- A pressure-sensitive adhesive composition according to claim 34, wherein the
 plurality of monomers further includes at least one aliphatic urethane di(meth)acrylate, in a total amount of up to about 1.6% by weight, based on the total weight of the plurality of monomers.
 - 36. A pressure-sensitive adhesive composition according to claim 35, wherein the at least one aliphatic urethane di(meth)acrylate comprises an aliphatic urethane diacrylate having a molecular weight of about 5,000 g/mol.

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- 37. A pressure-sensitive adhesive composition comprising an emulsion copolymer formed from a plurality of monomers that includes, on a percent-by-weight basis, based on the total weight of monomers:
- (a) about 80% to 90% of a plurality of soft monomers, selected from the group consisting of alkyl acrylates having 4 to 12 carbon atoms in the alkyl group;
- (b) about 3% to 10% of at least one hard monomer, selected from the group consisting of styrene, methyl methacrylate, n-hexyl methacrylate, ethyl methacrylate, isobutyl methacrylate and n-butyl methacrylate;
- (c) about 3% to 8% of at least one acid monomer, selected from the group consisting of methacrylic acid, acrylic acid, itaconic acid and fumaric acid;
 - (d) a positive amount up to about 1% of at least one alkylimidazolidone (meth)acrylate monomer; and
 - (e) about 0.5% to 2.5% of at least one trifluoroalkyl (meth)acrylate monomer.
- 15 38. A pressure-sensitive adhesive composition according to claim 37, wherein the plurality of monomers further includes at least one aliphatic urethane di(meth)acrylate, in a total amount of up to about 1.6% by weight, based on the total weight of the plurality of monomers.
- 39. A pressure-sensitive adhesive composition according to claim 38, wherein the at least one aliphatic urethane di(meth)acrylate comprises an aliphatic urethane diacrylate having a molecular weight of about 5,000 g/mol.
 - 40. A pressure-sensitive adhesive composition according to claim 37, wherein the plurality of soft monomers comprises:
 - (a) 2-ethylhexyl acrylate, in a total amount of from about 10% to 22% by weight, based on the total weight of the plurality of monomers; and
 - (b) butyl acrylate, in a total amount of from about 58% to 70% by weight, based on the total weight of the plurality of monomers.
- 30 41. A pressure-sensitive adhesive composition according to claim 37, wherein the at least one hard monomer comprises:

- (a) methyl methacrylate, in a total amount of from about 3% to 8% by weight, based on the total weight of the plurality of monomers; and
- (b) styrene, in a total amount of from about 1% to 5% by weight, based on the total weight of the plurality of monomers.

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- 42. A pressure-sensitive adhesive composition according to claim 37, wherein the at least one acid monomer comprises:
- (a) acrylic acid, in a total amount of from about 2% to 5% by weight, based on the total weight of the plurality of monomers; and
- (b) methacrylic acid, in a total amount of from about 2% to 5% by weight, based on the total weight of the plurality of monomers.
- 43. A pressure-sensitive adhesive composition according to claim 37, further comprising a surfactant system comprising at least one surfactant.

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44. A pressure-sensitive adhesive composition according to claim 43, wherein the surfactant system comprises at least one surfactant having an ethylene oxide content of about 30 moles ethylene oxide to 1 mole surfactant.

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- 45. A pressure-sensitive adhesive composition according to claim 43, wherein the at least one surfactant comprises at least one anionic surfactant and at least one nonionic surfactant.
- 46. A pressure-sensitive adhesive composition according to claim 37, wherein the composition is crosslinked with at least one crosslinking agent.

- 47. An adhesive construction comprising a pressure-sensitive adhesive composition according to any one of claims 1, 10, 23, 34, or 37, coated on or laminated to a facestock.
- 48. An adhesive construction according to claim 47, wherein the facestock comprises a vinyl film.

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L98
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1 SEA ABB=ON PLU=ON L98 AND L88
L99
                  D SCAN
      FILE 'REGISTRY' ENTERED AT 16:38:05 ON 24 JAN 2006
           61529 SEA ABB=ON PLU=ON L7 AND ACRYLAT?
T-100
L101
           41691 SEA ABB=ON PLU=ON L7 AND METHACRYLAT?
      FILE 'HCAPLUS' ENTERED AT 16:39:09 ON 24 JAN 2006
L102
          250165 SEA ABB=ON PLU=ON L100
L103
          185289 SEA ABB=ON PLU=ON L101
L104
            7010 SEA ABB=ON PLU=ON L100/RCT
           5375 SEA ABB=ON PLU=ON L101/RCT
38020 SEA ABB=ON PLU=ON L104 OR L105 OR ?ACRYLAT?(2A)(MONOM
L105
L106
                  ER? OR REACT? OR REAGENT?)
                  D QUE L92
L107
            4794 SEA ABB=ON PLU=ON L93 OR TRIFLUORO? (2A) ?ACRYLAT?
L108
             520 SEA ABB=ON PLU=ON L107 AND L106
L109
                1 SEA ABB=ON PLU=ON L96 AND L108
                  D SCAN
                  D QUE STAT
L110
                8 SEA ABB=ON PLU=ON L88 AND L107
L111
             560 SEA ABB=ON PLU=ON L88 AND L106
L112
                1 SEA ABB=ON PLU=ON L111 AND (L107 OR L96)
                  D QUE L91
L113
            4794 SEA ABB=ON PLU=ON L91 OR L107
                 D QUE L111
L114
                1 SEA ABB=ON PLU=ON L111 AND (L113 OR L96)
L115
             527 SEA ABB=ON PLU=ON L106 AND (L113 OR L96)
                  D QUE L103
          409093 SEA ABB=ON PLU=ON L102 OR L103 OR ?ACRYLAT?
L116
                  D OUE L113
L117
                1 SEA ABB=ON PLU=ON L113 AND L116 AND L96
                  D SCAN
               1 SEA ABB=ON PLU=ON L90 OR (L97 OR L98 OR L99)
8 SEA ABB=ON PLU=ON L118 OR LL109 OR L110 OR L112 OR
L118
L119
                 L114 OR L117 OR L118
L120
               1 SEA ABB=ON PLU=ON L119 AND L1
L121
               8 SEA ABB=ON PLU=ON L120 OR L119
             148 SEA ABB=ON PLU=ON L71
619 SEA ABB=ON PLU=ON L122 OR (URETHAN?(A)((DIMETHACRYLAT
L122
L123
                  ? OR DIACRYLAT?) OR DI(A)?ACRYLAT?))
               4 SEA ABB=ON PLU=ON L123 AND L88
L124
              0 SEA ABB=ON PLU=ON L123 AND L96
6 SEA ABB=ON PLU=ON L123 AND L113
18 SEA ABB=ON PLU=ON L121 OR L124 OR L126
L125
L126
L127
              66 SEA ABB=ON PLU=ON L9
L128
L129
              74 SEA ABB=ON PLU=ON L128 OR (ETHYLIMIDAZOLID? OR
                  ETHYL(A) IMIDAZOLID?)(A) ?ACRYLAT?
               9 SEA ABB=ON PLU=ON L129 AND L88
1 SEA ABB=ON PLU=ON L130 AND L107
1 SEA ABB=ON PLU=ON L130 AND L106
T-130
L131
L132
                  D SCAN
                  D OUE
T-133
              70 SEA ABB=ON PLU=ON L129 AND L116
               9 SEA ABB=ON PLU=ON L133 AND L88
L134
               4 SEA ABB=ON PLU=ON L133 AND L96
1 SEA ABB=ON PLU=ON L133 AND L107
L135
L136
              13 SEA ABB=ON PLU=ON L133 AND L106
L137
L138
              39 SEA ABB=ON PLU=ON L127 OR L130 OR L132 OR (L134 OR
                  L135 OR L136 OR L137)
             256 SEA ABB=ON PLU=ON SOFT? (2A) MONOMER?
621 SEA ABB=ON PLU=ON HARD? (2A) MONOMER?
L139
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L140

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L141
          11418 SEA ABB=ON PLU=ON ACID(2A)MONOMER?
             16 SEA ABB=ON PLU=ON L139 AND L140 AND L141
L142
                D SCAN TI
L143
              2 SEA ABB=ON PLU=ON L142 AND L88
                D SCAN
L144
              5 SEA ABB=ON PLU=ON L142 AND ADHESI?
                D SCAN TI
             40 SEA ABB=ON PLU=ON L143 OR L138
L145
L146
              1 SEA ABB=ON PLU=ON L142 AND L107
                D SCAN
L147
             40 SEA ABB=ON PLU=ON L145 OR L146
                D QUE L129
     FILE 'REGISTRY' ENTERED AT 17:20:21 ON 24 JAN 2006
     FILE 'HCAPLUS' ENTERED AT 17:20:38 ON 24 JAN 2006
                D QUE STAT L59
L148
           8122 SEA ABB=ON PLU=ON L48
          34091 SEA ABB=ON PLU=ON L50
T<sub>1</sub>149
L150
          54607 SEA ABB=ON PLU=ON L148 OR L149 OR ETHYL(A)?ACRYLAT?
          23193 SEA ABB=ON PLU=ON L56
L151
L152
          82607 SEA ABB=ON PLU=ON L149 OR L151 OR BUTYL(A)?ACRYLAT?
L153
          99065 SEA ABB=ON
                           PLU=ON L150 OR L152
          99246 SEA ABB=ON PLU=ON
L154
                                    L153 OR L139 OR SOFT (A) MONOMER
         370456 SEA ABB=ON PLU=ON L38 OR STYRENE
L155
L156
         143546 SEA ABB=ON PLU=ON L42
L157
          25769 SEA ABB=ON PLU=ON L61
L158
         195895 SEA ABB=ON PLU=ON L156 OR L157 OR METHYL(A)?ACRYLAT?
L159
           1118 SEA ABB=ON PLU=ON L44
L160
            451 SEA ABB=ON PLU=ON L46
L161
           2260 SEA ABB=ON PLU=ON L159 OR L160 OR HEXYL(A)?ACRYLAT?
L162
           8122 SEA ABB=ON PLU=ON L48
L163
          34091 SEA ABB=ON
                           PLU=ON
                                    L50
          54607 SEA ABB=ON PLU=ON L162 OR L163 OR ETHYL(A)?ACRYLAT?
L164
           4403 SEA ABB=ON PLU=ON L52
L165
L166
           1734 SEA ABB=ON PLU=ON L54
L167
           6886 SEA ABB=ON PLU=ON L165 OR L166 OR ISOBUTYL(A)?ACRYLAT
                ? OR (ISO OR I) (2A) BUTYL (2A) ?ACRYLAT?
L168
           3308 SEA ABB=ON PLU=ON L55
          52275 SEA ABB=ON PLU=ON L59
1.169
L170
          69113 SEA ABB=ON PLU=ON L168 OR L169 OR BUTYL(A)?ACRYLAT?
L171
                QUE ABB=ON PLU=ON HARD (A) MONOMER OR L140 OR L158 OR
                L155 OR L161 OR L164 OR L167
L172
          63096 SEA ABB=ON PLU=ON L63
          95226 SEA ABB=ON PLU=ON L65
L173
         203151 SEA ABB=ON PLU=ON L172 OR L173 OR (ACRYLIC OR
L174
                METHACRYLIC) (A) ACID
T-175
          10071 SEA ABB=ON PLU=ON L67 OR ITACONIC(A)ACID
                SEA ABB=ON PLU=ON L69 OR FUMERIC(A)ACID QUE ABB=ON PLU=ON ACID(A)MONOMER OR L174 OR L175 OR
L176
          15791 SEA ABB=ON
L177
                L176
L178
          40001 SEA ABB=ON PLU=ON L154 AND L171 AND L177
L179
          39289 SEA ABB=ON PLU=ON L178 AND L174
L180
          1162 SEA ABB=ON PLU=ON L178 AND L88
L181
          57950 SEA ABB=ON
                           PLU=ON SOFT (A) MONOMER OR L148 OR L149 OR
                L151 OR L139
L182
         279837 SEA ABB=ON PLU=ON
                                   L38
L183
         200685 SEA ABB=ON PLU=ON HARD(A)MONOMER OR L140 OR L156 OR
                L157 OR L159 OR L160 OR L162 OR L163 OR L165 OR L166
                OR L168 OR L169
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26124 SEA ABB=ON PLU=ON L181 AND L183 AND L177

L184

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738 SEA ABB=ON PLU=ON L184 AND L88
L185
          52275 SEA ABB=ON PLU=ON L59
L186
          58657 SEA ABB=ON PLU=ON SOFT(A)MONOMER OR L148 OR L186
1.187
L188
         279837 SEA ABB=ON PLU=ON L38
         151073 SEA ABB=ON PLU=ON HARD(A)MONOMER OR L140 OR L156 OR
L189
                 L159 OR L162 OR L165 OR L168
         18150 SEA ABB=ON PLU=ON L187 AND L189 AND L177 634 SEA ABB=ON PLU=ON L190 AND L88
L190
L191
          12917 SEA ABB=ON PLU=ON L88(2A)SENSITIV?
L192
            630 SEA ABB=ON PLU=ON L192 AND L191
L193
         223747 SEA ABB=ON PLU=ON SURFACTANT?
68 SEA ABB=ON PLU=ON L194 AND L193
405 SEA ABB=ON PLU=ON (CROSSLINK OR CROSS(A)LINK) (2A)AGEN
L194
L195
L196
                 T?
L197
               O SEA ABB=ON PLU=ON L195 AND L196
L198
               1 SEA ABB=ON PLU=ON L196 AND L193
                 D SCAN
         287923 SEA ABB=ON PLU=ON CROSSLINK? OR CROSS(A)LINK?
0 SEA ABB=ON PLU=ON L199 AND L96
L199
L200
              1 SEA ABB=ON PLU=ON L196 AND L193
L201
L202
             198 SEA ABB=ON PLU=ON L199 AND L193
             13 SEA ABB=ON PLU=ON L202 AND L194
L203
                 D SCAN
                 D SCAN TI
           2710 SEA ABB=ON PLU=ON L178 AND L194
T<sub>1</sub>204
             1 SEA ABB=ON PLU=ON L204 AND L196
T-205
L206
              54 SEA ABB=ON PLU=ON L147 OR L198 OR L201 OR L203 OR
                 L205
             13 SEA ABB=ON PLU=ON L195 AND L199
54 SEA ABB=ON PLU=ON L207 OR L206
L207
L208
          17891 SEA ABB=ON PLU=ON L39
L209
L210
         279837 SEA ABB=ON PLU=ON L38
L211
            132 SEA ABB=ON PLU=ON L74
     FILE 'REGISTRY' ENTERED AT 18:37:57 ON 24 JAN 2006
                 E MATRIFE/CN
                 E NORSOCRYL/CN
L212
               1 SEA ABB=ON PLU=ON NORSOCRYL/CN
                 D CRN
                 D RN
               1 SEA ABB=ON PLU=ON 132893-93-7/RN
1.213
     FILE 'HCAPLUS' ENTERED AT 18:39:09 ON 24 JAN 2006
            135 SEA ABB=ON PLU=ON L211 OR TRIFLUOROEHTYL (A) METHACRYLA
L214
                 T? OR TRI(2A) FLUORO(2A) METHACRYLAT? OR MATRIFE
                 D QUE L129
L215
               4 SEA ABB=ON PLU=ON L212 OR L213
L216
             118 SEA ABB=ON PLU=ON L129 OR L96 OR L215 OR NORSOCRYL
L217
               1 SEA ABB=ON PLU=ON L209 AND L169 AND L156 AND L155
                 AND L172 AND L135 AND L173
                 D SCAN
     FILE 'REGISTRY' ENTERED AT 18:46:06 ON 24 JAN 2006
     FILE 'HCAPLUS' ENTERED AT 18:52:31 ON 24 JAN 2006
       34091 SEA ABB=ON PLU=ON L50
                 D QUE
T<sub>1</sub>219
         143546 SEA ABB=ON PLU=ON L42
L220
          17891 SEA ABB=ON PLU=ON L39
L221
              3 SEA ABB=ON PLU=ON L220 AND L169 AND L219 AND L182
                 AND L172 AND L173 AND L216
                 D SCAN
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D SCAN TI

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FILE 'REGISTRY' ENTERED AT 19:05:10 ON 24 JAN 2006
               3 SEA ABB=ON PLU=ON L39 AND L59 AND L42 AND L38 AND
L222
                 L63 AND L65 AND L9
     FILE 'HCAPLUS' ENTERED AT 19:07:18 ON 24 JAN 2006
               2 SEA ABB=ON PLU=ON L222
L223
                 D SCAN TI
L224
               1 SEA ABB=ON PLU=ON L3
L225
               1 SEA ABB=ON PLU=ON L4
              2 SEA ABB=ON PLU=ON (L223 OR L224 OR L225)
59 SEA ABB=ON PLU=ON L208 OR L215 OR L217 OR L221 OR
L226
L227
                 L226
L228
               1 SEA ABB=ON PLU=ON L1 AND L227
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=> => d que stat 1227
              1 SEA FILE=HCAPLUS ABB=ON PLU=ON US20050176876/PN
L1
L3
              1 SEA FILE=REGISTRY ABB=ON PLU=ON 861509-70-8/RN
              1 SEA FILE=REGISTRY ABB=ON PLU=ON 861509-72-0/RN
L4
         317400 SEA FILE=REGISTRY ABB=ON PLU=ON POLYACRYLIC/PCT 139 SEA FILE=REGISTRY ABB=ON PLU=ON 86261-90-7/CRN
L7
L9
          24225 SEA FILE=REGISTRY ABB=ON PLU=ON L7 AND 1-100/F
L14
          8895 SEA FILE=REGISTRY ABB=ON PLU=ON L7 AND TRIFLUORO?
L37
L38
          71861 SEA FILE=REGISTRY ABB=ON PLU=ON 100-42-5/CRN
1,39
          18088 SEA FILE=REGISTRY ABB=ON PLU=ON 103-11-7/CRN
L42
          71526 SEA FILE=REGISTRY ABB=ON
                                           PLU=ON 80-62-6/CRN
            785 SEA FILE=REGISTRY ABB=ON PLU=ON 142-09-6/CRN
L44
1.46
            485 SEA FILE=REGISTRY ABB=ON PLU=ON 2499-95-8/CRN
L48
           5404 SEA FILE=REGISTRY ABB=ON PLU=ON 97-63-2/CRN
L50
          19903 SEA FILE=REGISTRY ABB=ON PLU=ON 140-88-5/CRN
L52
           4487 SEA FILE=REGISTRY ABB=ON
                                           PLU=ON 97-86-9/CRN
           1350 SEA FILE=REGISTRY ABB=ON PLU=ON 106-63-8/CRN
L54
              1 SEA FILE=REGISTRY ABB=ON PLU=ON N-BUTYL METHACRYLATE/
L55
                CN
          20154 SEA FILE=REGISTRY ABB=ON PLU=ON 97-88-1/CRN
L56
L59
          44855 SEA FILE=REGISTRY ABB=ON PLU=ON
                                                   141-32-2/CRN
L61
          12432 SEA FILE=REGISTRY ABB=ON
                                                   96-33-3/CRN
                                           PLU=ON
          45073 SEA FILE=REGISTRY ABB=ON PLU=ON
L63
                                                   79-41-4/CRN
L65
          58387 SEA FILE=REGISTRY ABB=ON PLU=ON 79-10-7/CRN
L67
           5544 SEA FILE=REGISTRY ABB=ON PLU=ON 97-65-4/CRN
L69
          33624 SEA FILE=REGISTRY ABB=ON PLU=ON 110-17-8/CRN
L71
            175 SEA FILE=REGISTRY ABB=ON PLU=ON 72869-86-4/CRN
          13839 SEA FILE=HCAPLUS ABB=ON PLU=ON ADHESI? (2A) PRESSUR?
L88
             11 SEA FILE=HCAPLUS ABB=ON PLU=ON ALKYLIMIDAZOL? (3A)?ACR
L89
                YL?
L90
              1 SEA FILE=HCAPLUS ABB=ON PLU=ON L88 AND L89
L91
           4283 SEA FILE=HCAPLUS ABB=ON PLU=ON L37
L92
           8895 SEA FILE=REGISTRY ABB=ON PLU=ON L14 AND TRIFLUORO?
1.93
           4283 SEA FILE=HCAPLUS ABB=ON PLU=ON L92
L94
              8 SEA FILE=HCAPLUS ABB=ON PLU=ON ALKYL? (2A) IMIDAZOL? (A)
                ?ACRYL?
L95
             21 SEA FILE=HCAPLUS ABB=ON PLU=ON ALKYL? (2A) IMIDAZOL? (2A
                )?ACRYL?
L96
             30 SEA FILE=HCAPLUS ABB=ON PLU=ON L95 OR L94 OR L89
1.97
              1 SEA FILE=HCAPLUS ABB=ON PLU=ON L96 AND L88
L98
              1 SEA FILE=HCAPLUS ABB=ON PLU=ON L93 AND L96
L99
              1 SEA FILE=HCAPLUS ABB=ON PLU=ON L98 AND L88
          61529 SEA FILE=REGISTRY ABB=ON PLU=ON L7 AND ACRYLAT?
41691 SEA FILE=REGISTRY ABB=ON PLU=ON L7 AND METHACRYLAT?
L100
L101
```

L102	250165	SEA FILE=HCAPLUS ABB=ON PLU=ON L1	00
L103	185289	SEA FILE=HCAPLUS ABB=ON PLU=ON L1	01
L104	7010	SEA FILE=HCAPLUS ABB=ON PLU=ON L1	00/RCT
L105	5375		01/RCT
L106			04 OR L105 OR
D100	30020	?ACRYLAT? (2A) (MONOMER? OR REACT? OR	
L107	4704		3 OR TRIFLUORO?(2A)?
штол	4/34		3 OR TRIFLOORO: (ZA):
	•	ACRYLAT?	0 NW 1105
L110			8 AND L107
L111			8 AND L106
L112	1		11 AND (L107 OR
		L96)	
L113	4794	SEA FILE=HCAPLUS ABB=ON PLU=ON L9	1 OR L107
L114	1	SEA FILE=HCAPLUS ABB=ON PLU=ON L1	11 AND (L113 OR
		L96)	
L116	409093	SEA FILE=HCAPLUS ABB=ON PLU=ON L1	02 OR L103 OR
		?ACRYLAT?	
L117	1	SEA FILE=HCAPLUS ABB=ON PLU=ON L1	13 AND L116 AND L96
L118	1	SEA FILE=HCAPLUS ABB=ON PLU=ON L9	0 OR (L97 OR L98 OR
1110	_	L99)	o on (13) on 130 on
L119	٥	•	18 OR LL109 OR L110
пттэ	0		18 OR HILLO OR HILL
	-	OR L112 OR L114 OR L117 OR L118	10 AND 11
L120			19 AND L1
L121			20 OR L119
L122		SEA FILE=HCAPLUS ABB=ON PLU=ON L7	
L123	619		22 OR (URETHAN? (A) ((
		DIMETHACRYLAT? OR DIACRYLAT?) OR DI	
L124			23 AND L88
L126	6	SEA FILE=HCAPLUS ABB=ON PLU=ON L1:	23 AND L113
L127	18	SEA FILE=HCAPLUS ABB=ON PLU=ON L1:	21 OR L124 OR L126
L128	66	SEA FILE=HCAPLUS ABB=ON PLU=ON L9	
L129	74	SEA FILE=HCAPLUS ABB=ON PLU=ON L1:	28 OR (ETHYLIMIDAZOL
		ID? OR ETHYL(A) IMIDAZOLID?)(A) ?ACRY	LAT?
L130	9		29 AND L88
L132			30 AND L106
L133		· · · · · · · · · · · · · · · · · · ·	29 AND L116
L134			33 AND L88
L135			33 AND L96
L136			33 AND L107
L137			33 AND L106
			27 OR L130 OR L132
L138	39		27 OR LI30 OR LI32
	256	OR (L134 OR L135 OR L136 OR L137)	DMO (03) MOMONEDO
L139			FT? (2A) MONOMER?
L140			RD? (2A) MONOMER?
L141			ID (2A) MONOMER?
L142	16		39 AND L140 AND
		L141	
L143	2	SEA FILE=HCAPLUS ABB=ON PLU=ON L14	42 AND L88
L145	40	SEA FILE=HCAPLUS ABB=ON PLU=ON L14	43 OR L138
L146	1	SEA FILE=HCAPLUS ABB=ON PLU=ON L14	42 AND L107
L147	40	SEA FILE=HCAPLUS ABB=ON PLU=ON L14	45 OR L146
L148	8122	SEA FILE=HCAPLUS ABB=ON PLU=ON L4	3 .
L149		SEA FILE=HCAPLUS ABB=ON PLU=ON L5	
L150			48 OR L149 OR
-100	51007	ETHYL(A)?ACRYLAT?	
L151	22102	SEA FILE=HCAPLUS ABB=ON PLU=ON L50	5
L152	02007		49 OR L151 OR
		BUTYL(A)?ACRYLAT?	
	0000	ODA DILD HOADING AND ON MIN OF THE	-0 OD T1-0
L153			50 OR L152
L153 L154		SEA FILE=HCAPLUS ABB=ON PLU=ON L1	50 OR L152 53 OR L139 OR

	250456	CENTER WANTER AND ON THE ON THE OR OTHER
L155		SEA FILE=HCAPLUS ABB=ON PLU=ON L38 OR STYRENE
L156		SEA FILE=HCAPLUS ABB=ON PLU=ON L42
L157	25769	SEA FILE=HCAPLUS ABB=ON PLU=ON L61
L158	195895	SEA FILE=HCAPLUS ABB=ON PLU=ON L156 OR L157 OR
		METHYL (A) ?ACRYLAT?
L159	111Ω	SEA FILE=HCAPLUS ABB=ON PLU=ON L44
L160		SEA FILE=HCAPLUS ABB=ON PLU=ON L46
L161	2260	SEA FILE=HCAPLUS ABB=ON PLU=ON L159 OR L160 OR
		HEXYL (A) ?ACRYLAT?
L162	8122	SEA FILE=HCAPLUS ABB=ON PLU=ON L48
L163	34091	SEA FILE=HCAPLUS ABB=ON PLU=ON L50
L164	54607	SEA FILE=HCAPLUS ABB=ON PLU=ON L162 OR L163 OR
2201	51007	ETHYL (A) ?ACRYLAT?
T 1 C E	4402	SEA FILE=HCAPLUS ABB=ON PLU=ON L52
L165		
L166		SEA FILE=HCAPLUS ABB=ON PLU=ON L54
L167	6886	SEA FILE=HCAPLUS ABB=ON PLU=ON L165 OR L166 OR
		ISOBUTYL(A)?ACRYLAT? OR (ISO OR I)(2A)BUTYL(2A)?ACRYLAT
		?
L168	3308	SEA FILE=HCAPLUS ABB=ON PLU=ON L55
L169		SEA FILE=HCAPLUS ABB=ON PLU=ON L59
L171	32273	QUE ABB=ON PLU=ON HARD (A) MONOMER OR L140 OR L158 OR
шт/т		·-
		L155 OR L161 OR L164 OR L167
L172		SEA FILE=HCAPLUS ABB=ON PLU=ON L63
L173	95226	SEA FILE=HCAPLUS ABB=ON PLU=ON L65
L174	203151	SEA FILE=HCAPLUS ABB=ON PLU=ON L172 OR L173 OR
		(ACRYLIC OR METHACRYLIC) (A) ACID
L175	10071	SEA FILE=HCAPLUS ABB=ON PLU=ON L67 OR ITACONIC(A) ACID
11.5	10071	SEM TIBE-NOMING TEB-ON TIBO-ON TO ON TIMEONIC (II) NOTE
T 176	15701	OFF THE MANNING APP ON THE OWN TO OF THEFT AND AGE
L176	15/91	SEA FILE=HCAPLUS ABB=ON PLU=ON L69 OR FUMERIC(A)ACID
L177		QUE ABB=ON PLU=ON ACID(A)MONOMER OR L174 OR L175 OR
		L176
L178	40001	SEA FILE=HCAPLUS ABB=ON PLU=ON L154 AND L171 AND
		L177
L182	279837	SEA FILE=HCAPLUS ABB=ON PLU=ON L38
L186		SEA FILE=HCAPLUS ABB=ON PLU=ON L59
L187	58657	SEA FILE=HCAPLUS ABB=ON PLU=ON SOFT(A)MONOMER OR
		L148 OR L186
L189	151073	SEA FILE=HCAPLUS ABB=ON PLU=ON HARD(A)MONOMER OR
		L140 OR L156 OR L159 OR L162 OR L165 OR L168
L190	18150	SEA FILE=HCAPLUS ABB=ON PLU=ON L187 AND L189 AND
	10100	L177
T 1 0 1	C24	
L191		SEA FILE=HCAPLUS ABB=ON PLU=ON L190 AND L88
L192		SEA FILE=HCAPLUS ABB=ON PLU=ON L88(2A)SENSITIV?
L193		SEA FILE=HCAPLUS ABB=ON PLU=ON L192 AND L191
L194	223747	SEA FILE=HCAPLUS ABB=ON PLU=ON SURFACTANT?
L195	68	SEA FILE=HCAPLUS ABB=ON PLU=ON L194 AND L193
L196		SEA FILE=HCAPLUS ABB=ON PLU=ON (CROSSLINK OR
		CROSS (A) LINK) (2A) AGENT?
T 1 0 0	-	SEA FILE=HCAPLUS ABB=ON PLU=ON L196 AND L193
L198		
L199	28/923	SEA FILE=HCAPLUS ABB=ON PLU=ON CROSSLINK? OR
		CROSS (A) LINK?
L201	1	SEA FILE=HCAPLUS ABB=ON PLU=ON L196 AND L193
L202	198	SEA FILE=HCAPLUS ABB=ON PLU=ON L199 AND L193
L203		SEA FILE=HCAPLUS ABB=ON PLU=ON L202 AND L194
L204		SEA FILE=HCAPLUS ABB=ON PLU=ON L178 AND L194
L205	1	SEA FILE=HCAPLUS ABB=ON PLU=ON L204 AND L196
L206		
	54	SEA FILE=HCAPLUS ABB=ON PLU=ON L147 OR L198 OR L201
		OR L203 OR L205
L207		
L207 L208	13	OR L203 OR L205
L208	13 54	OR L203 OR L205 SEA FILE=HCAPLUS ABB=ON PLU=ON L195 AND L199 SEA FILE=HCAPLUS ABB=ON PLU=ON L207 OR L206
	13 54	OR L203 OR L205 SEA FILE=HCAPLUS ABB=ON PLU=ON L195 AND L199

```
1 SEA FILE=REGISTRY ABB=ON PLU=ON NORSOCRYL/CN
L212
             1 SEA FILE=REGISTRY ABB=ON PLU=ON 132893-93-7/RN
L213
             4 SEA FILE=HCAPLUS ABB=ON PLU=ON L212 OR L213
L215
           118 SEA FILE=HCAPLUS ABB=ON PLU=ON L129 OR L96 OR L215
L216
               OR NORSOCRYL
              1 SEA FILE=HCAPLUS ABB=ON PLU=ON L209 AND L169 AND
L217
                L156 AND L155 AND L172 AND L135 AND L173
L219
         143546 SEA FILE=HCAPLUS ABB=ON PLU=ON L42
          17891 SEA FILE=HCAPLUS ABB=ON PLU=ON L39
L220
             3 SEA FILE=HCAPLUS ABB=ON PLU=ON L220 AND L169 AND
L221
               L219 AND L182 AND L172 AND L173 AND L216
             3 SEA FILE=REGISTRY ABB=ON PLU=ON L39 AND L59 AND L42
L222
               AND L38 AND L63 AND L65 AND L9
L223
             2 SEA FILE=HCAPLUS ABB=ON PLU=ON
                                                L222
             1 SEA FILE=HCAPLUS ABB=ON PLU=ON L3
L224
             1 SEA FILE=HCAPLUS ABB=ON PLU=ON L4
L225
L226
             2 SEA FILE=HCAPLUS ABB=ON PLU=ON
                                               (L223 OR L224 OR
               L225)
L227
            59 SEA FILE=HCAPLUS ABB=ON PLU=ON L208 OR L215 OR L217
               OR L221 OR L226
```

=> d 1227 1-59 ibib abs hitstr hitind

L227 ANSWER 1 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1351061 HCAPLUS <<LOGINID::20060124>>

DOCUMENT NUMBER: 144:71207

TITLE: Single-component system based on coreactive

latex, preparation process, and application in

the field of formaldehyde-free coatings

INVENTOR(S): Verge, Christophe; Cochet, Francoise; Klein,

Sophie

PATENT ASSIGNEE(S): Arkema, Fr.

SOURCE: Fr. Demande, 31 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2872167	A1	20051230	FR 2004-6996	2004
PRIORITY APPLN. INFO.:			FR 2004-6996	0625
				2004 0625

AB Single-component curable latex coating compns. with good storage stability contain a polymer prepared from ≥1 ethylenically unsatd. monomers having R1NC(X)NH groups (R1 = radically polymerizable group, X = O or S) (I) and a polymer prepared from ≥1 ethylenically unsatd. monomer having R1NC(X)N groups (R1 = radically polymerizable group, X = O or S) similar to or different than I and a functional group selected from acetal, mercaptal, mercaptol, dioxolane, and dithiolane. A typical coating composition was prepd by mixing an emulsion prepared by radical polymerization of Me methacrylate (II) 42, Bu acrylate (III) 46, acrylamidomethylpropanesulfonic acid 2, and Norsocryl 104 (imidazolidonylethyl methacrylate) (IV) 10 parts

with an emulsion prepared by radical polymerization of II 43, III 46, acrylic acid 1, and IV 10 parts in the presence of Highlink DM (2,2-dimethoxyacetaldehyde) which reacted with IV during polymerization IT 871916-37-9P, 2-Acrylamido-2-methylpropanesulfonic acid-butyl acrylate-Norsocryl 104-methyl methacrylate copolymer 871916-39-1DP, Acrylic acid-butyl acrylate-Norsocryl 104-methyl methacrylate copolymer, reaction products with dimethoxyacetaldehyde RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (storage-stable, single-component system based on coreactive latexes for formaldehyde-free curable coatings) RN 871916-37-9 HCAPLUS CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1propanesulfonic acid and 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 86261-90-7 CMF C9 H14 N2 O3

CM 2

CRN 15214-89-8 CMF C7 H13 N O4 S

$$\begin{array}{c} & \text{NH-C-CH} \\ \text{NH-C-CH} \\ | \\ \text{Me-C-CH}_2 - \text{SO}_3\text{H} \\ | \\ \text{Me} \end{array}$$

CM 3

CRN 141-32-2 CMF C7 H12 O2

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c|c} ^{H_2C} & \text{O} \\ \parallel & \parallel \\ \text{Me-} & \text{C-} & \text{C-} & \text{OMe} \end{array}$$

RN 871916-39-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 86261-90-7 CMF C9 H14 N2 O3

$$\begin{picture}(20,10) \put(0,0){\line(1,0){100}} \put(0,0){\line(1,0){1$$

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 80-62-6 CMF C5 H8 O2

CM 4

CRN 79-10-7 CMF C3 H4 O2

```
HO- C- CH = CH2
IC
     ICM C08L033-14
         C08L033-24; C08J003-26; C09D005-00; D21H017-38; D21H019-44;
          D06N003-04
CC
     42-10 (Coatings, Inks, and Related Products)
     single component curable latex coating ureido polymer;
     dimethoxyacetaldehyde adduct imidazolidonylethyl
     methacrylate copolymer single component curable coating;
     imidazolidonylethyl methacrylate copolymer single
     component curable latex coating; dithiolane polymer single
     component curable latex coating; dioxolane polymer single
     component curable latex coating; mercaptol polymer single
     component curable latex coating; mercaptal polymer single
     component curable latex coating; acetal polymer single component
     curable latex coating
     51673-84-8DP, Highlink DM, reaction products with acrylic acid-Bu
TΤ
     acrylate-imidazolidonylethyl methacrylate-Me
     methacrylate copolymer 871916-37-9P,
     2-Acrylamido-2-methylpropanesulfonic acid-butyl acrylate
     -Norsocryl 104-methyl methacrylate copolymer
     871916-39-1DP, Acrylic acid-butyl acrylate
     -Norsocryl 104-methyl methacrylate copolymer,
     reaction products with dimethoxyacetaldehyde
     RL: IMF (Industrial manufacture); POF (Polymer in formulation);
     PRP (Properties); TEM (Technical or engineered material use); PREP
     (Preparation); USES (Uses)
        (storage-stable, single-component system based on coreactive
        latexes for formaldehyde-free curable coatings)
                              THERE ARE 2 CITED REFERENCES AVAILABLE
REFERENCE COUNT:
                        2
                              FOR THIS RECORD. ALL CITATIONS AVAILABLE
                              IN THE RE FORMAT
L227 ANSWER 2 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN
                        2005:1173907 HCAPLUS <<LOGINID::20060124>>
ACCESSION NUMBER:
DOCUMENT NUMBER:
                        143:430062
                        Printing plate precursor comprising
TITLE:
                        solvent-resistant copolymer
INVENTOR(S):
                        Kitson, Anthony P.; Ray, Kevin B.; Ray,
                        Joanne; Jarek, Mathias; Savariar-Hauck, Celin
                        Kodak Polychrome Graphics LLC, USA
PATENT ASSIGNEE(S):
SOURCE:
                        U.S. Pat. Appl. Publ., 22 pp., Cont.-in-part
                        of U.S. Ser. No. 681,701.
                        CODEN: USXXCO
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                        KIND
                               DATE
                                           APPLICATION NO.
                                                                   DATE
     -----
                        _ _ _ _
                                -----
                                            -----
    US 2005244749
                         A1
                               20051103
                                           US 2005-130797
                                                                   2005
                                                                   0517
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US 2005079432

US 6893783

A1

B2

20050414

20050517

Les Henderson	Page 13	•	571-272-2538

US 2003-681701

JP 2005115388 A2 20050428 JP 2004-295160

2004 1007

PRIORITY APPLN. INFO.:

US 2003-681701

2003

1008

A pos.-working, thermally imageable element generally comprising a AB multi-layered imageable coating. The invention provides an imageable element comprising a substrate, an ink-receptive top layer, and an underlayer, the underlayer including a specific copolymer described herein. The copolymer can be a polymer comprising constitutional units derived from: (a) a monomer having a cyclic urea group; (b) a monomer comprising an N-substituted maleimide; (c) a (meth)acrylamide or (meth)acrylate monomer; and (d) a (meth)acrylic acid or vinyl HOBz monomer. Optionally, the copolymer can be a polymer comprising constitutional units derived from: (a) a monomer having a cyclic urea group; (b) a (meth)acrylic acid or vinyl HOBz monomer; (c) and a (meth)acrylonitrile monomer. The imageable element may be used to prepare a lithog, printing plate that is resistant to press chemical and can optionally be baked to increase press run-length. ΙT 868279-66-7, Methacrylamide-methacrylic acid-Plex

68520-N-phenylmaleimide copolymer 868279-67-8, Methacrylic acid-N-methoxymethylmethacrylamide-Plex 68520-N-phenylmaleimide copolymer 868279-68-9, Acrylonitrile-methacrylic acid-Plex 68520-N-phenylmaleimide copolymer

RL: NUU (Other use, unclassified); USES (Uses)
(printing plate precursor comprising solvent-resistant

copolymer) 868279-66-7 HCAPLUS

2-Propenoic acid, 2-methyl-, polymer with 2-methyl-2-propenamide, 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate and 1-phenyl-1H-pyrrole-2,5-dione (9CI) (CA INDEX NAME)

CM 1

RN

CN

CRN 86261-90-7 CMF C9 H14 N2 O3

CM 2

CRN 941-69-5 CMF C10 H7 N O2

CRN 79-41-4 CMF C4 H6 O2

$$\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me-C-CO}_2 \text{H} \end{array}$$

CM 4

CRN 79-39-0 CMF C4 H7 N O

$$\begin{array}{ccc} ^{H_2C} & \text{O} \\ & \parallel & \parallel \\ \text{Me-} & \text{C-} & \text{C-} & \text{NH}_2 \end{array}$$

RN 868279-67-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with N-(methoxymethyl)-2methyl-2-propenamide, 2-(2-oxo-1-imidazolidinyl)ethyl
2-methyl-2-propenoate and 1-phenyl-1H-pyrrole-2,5-dione (9CI) (CA
INDEX NAME)

CM 1

CRN 86261-90-7 CMF C9 H14 N2 O3

CM 2

CRN 3644-12-0 CMF C6 H11 N O2

CRN 941-69-5 CMF C10 H7 N O2

CM 4

CRN 79-41-4 CMF C4 H6 O2

$$\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me-C-CO}_2 \text{H} \end{array}$$

RN 868279-68-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate, 1-phenyl-1H-pyrrole-2,5-dione and 2-propenenitrile (9CI) (CA INDEX NAME)

CM 1

CRN 86261-90-7 CMF C9 H14 N2 O3

$$\begin{array}{c} \overset{H}{\overset{N}{\overset{}{\overset{}{\overset{}{\overset{}{\overset{}{\overset{}{\overset{}{\overset{}}{\overset{}{\overset{}}{\overset{}{\overset{}}{\overset{}}{\overset{}}{\overset{}}{\overset{}}{\overset{}}{\overset{}}{\overset{}}}}} 0}} \\ \overset{O}{\overset{CH_2}{\overset{CH_2-CH_2-O-C-C-Me}}} \\ \end{array}$$

CM 2

CRN 941-69-5 CMF C10 H7 N O2

CRN 107-13-1 CMF C3 H3 N

 $H_2C = CH - C = N$

CM 4

CRN 79-41-4 CMF C4 H6 O2

CH₂ Me-C-CO2H

IC ICM G03C001-492

INCL 430270100

74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) Section cross-reference(s): 35

IT**868279-66-7**, Methacrylamide-methacrylic acid-Plex 68520-N-phenylmaleimide copolymer 868279-67-8, Methacrylic acid-N-methoxymethylmethacrylamide-Plex 68520-N-phenylmaleimide copolymer 868279-68-9,

Acrylonitrile-methacrylic acid-Plex 68520-N-phenylmaleimide copolymer

RL: NUU (Other use, unclassified); USES (Uses) (printing plate precursor comprising solvent-resistant

L227 ANSWER 3 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1130754 HCAPLUS <<LOGINID::20060124>>

DOCUMENT NUMBER:

143:389621

TITLE:

Polymers with H-bridge forming functionalities

for improving antiwear protection of lubricating oils and hydraulic fluids Scherer, Markus; Schweder, Roland

INVENTOR(S): PATENT ASSIGNEE(S):

Rohmax Additives G.m.b.H., Germany

SOURCE:

PCT Int. Appl., 83 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE _____

WO 2005097956 A1 20051020 WO 2005-EP1905 2005 0224 WO 2005097956 C1 20051215 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG DE 102004018094 A1 20051103 DE 2004-102004018094 2004 0408 PRIORITY APPLN. INFO.: DE 2004-102004018094A 2004 0408 The invention relates to lubricating oil formulations comprising copolymers or graft copolymers produced by radically polymerization of polymerizable monomers and in addition comprising long-chain ethylenically unsatd. compds. containing alkyl, in particular acrylate or methacrylate substitutes provided with H-bridge donator functions. The monomer exhibiting a H-bridge donator property is contained in the polymer backbone or in graft side branches. Apart from the polymers containing monomers provided with the H-bridge donator functions, the invention relates to polymers containing monomers simultaneously carrying donator and acceptor functions. The H-bridge donator functions of a polymer, in particular a simultaneous availability of the H-bridge donator and acceptor functions produce the pos. effects on the antiwear protection and on a detergent and dispersant action. The polymers are suitable, in the form of additives, for lubricating oil formulations (e.g., motor oils or hydraulic fluids) exhibiting an improved antiwear behavior. 837430-76-9D, Plex 6844-0, copolymer with methacrylate alkyl esters RL: TEM (Technical or engineered material use); USES (Uses) (for improving antiwear protection of lubricating oils and hydraulic fluids) 837430-76-9 HCAPLUS 2-Propenoic acid, 2-methyl-, methyl ester, mixt. with 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate (9CI) INDEX NAME) CM 1

AB

IT

RN

CN

CRN 86261-90-7 CMF C9 H14 N2 O3

CRN 80-62-6 CMF C5 H8 O2

H₂C O || || Me- C- C- OMe

IC ICM C10M169-04

ICS C10M157-04; C10M161-00; C08F265-04; C08F267-06; C08F265-10; C08F267-10; C08F020-12; C08F020-56; C08F020-60

CC 51-8 (Fossil Fuels, Derivatives, and Related Products)

TT 79-41-4D, Methacrylic acid, copolymers containing alkyl esters 88-12-0D, copolymers with methacrylate alkyl esters 112-38-9D, 10-Undecenoic acid, reaction product with

methacrylate alkyl esters 112-55-0D, Dodecylmercaptan, reaction product with methacrylate alkyl esters 9043-30-5D, Lutensol TO20, copolymer with methacrylate alkyl esters 25103-58-6D, tert-Dodecylmercaptan,

reaction product with methacrylate alkyl esters

837430-76-9D, Plex 6844-0, copolymer with

methacrylate alkyl esters

RL: TEM (Technical or engineered material use); USES (Uses) (for improving antiwear protection of lubricating oils and hydraulic fluids)

REFERENCE COUNT:

THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L227 ANSWER 4 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2005:735355 HCAPLUS <<LOGINID::20060124>>

DOCUMENT NUMBER:

143:194686

TITLE:

Water-whitening resistant pressure

-sensitive adhesive

INVENTOR(S):

Lee, Sou Phong

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S. Pat. Appl. Publ., 15 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005176876	A1	20050811	US 2004-774617	2004 0209

```
WO 2005077986
                           A1
                                  20050825
                                               WO 2005-US3317
                                                                        2005
                                                                        0203
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ,
              CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG,
              ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
              MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL,
              PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,
              TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
              ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT,
              LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF,
              CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:
                                               US 2004-774617
                                                                        2004
                                                                        0209
     Pressure-sensitive adhesive compns. that
AB
     resist water-whitening are provided. The compns. comprise
     emulsion copolymers formed from a plurality of monomers that
     includes (meth)acrylic monomers, at least one
     trifluoroalkyl (meth) acrylate monomer,
     and at least one alkylimidazolidone (meth)
     acrylate monomer. Preferably, the (meth)acrylic
     monomers comprise a plurality of soft monomers
     , at least one hard monomer and at least one
     acid monomer. The plurality of monomers may
     further include at least one aliphatic urethane di(meth)
     acrylate, an oligomer. The pressure-sensitive
     adhesive composition also comprises a surfactant system
     including at least one surfactant.
     861509-70-8P 861509-72-0P
     RL: IMF (Industrial manufacture); POF (Polymer in formulation);
     TEM (Technical or engineered material use); PREP (Preparation);
     USES (Uses)
        (water-whitening resistant pressure-sensitive
        adhesive)
RN
     861509-70-8 HCAPLUS
     2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,
CN
     ethenylbenzene, 2-ethylhexyl 2-propenoate, methyl
     2-methyl-2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl
     2-methyl-2-propenoate, 2-propenoic acid and 2,2,2-trifluoroethyl
     2-methyl-2-propenoate (9CI) (CA INDEX NAME)
     CM
     CRN 86261-90-7
     CMF C9 H14 N2 O3
```

CRN 352-87-4 CMF C6 H7 F3 O2

$$\begin{smallmatrix} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{F}_3\text{C--} & \text{CH}_2\text{--} & \text{O--} & \text{C--} & \text{Me} \end{smallmatrix}$$

CM 3

CRN 141-32-2 CMF C7 H12 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{n-BuO-C-CH} \end{array} \text{CH}_2$$

CM 4

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \text{CH}_2-\text{O}-\text{CH} == \text{CH}_2 \\ \text{CH}_2-\text{CH} == \text{CH}_2 \end{array}$$

 Et-CH-Bu-n

CM 5

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CM 6

CRN 80-62-6 CMF C5 H8 O2

CM 7

CRN 79-41-4 CMF C4 H6 O2

CM 8

CRN 79-10-7 CMF C3 H4 O2

RN 861509-72-0 HCAPLUS

2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, Ebecryl 230, ethenylbenzene, 2-ethylhexyl 2-propenoate, methyl 2-methyl-2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate, 2-propenoic acid and 2,2,2-trifluoroethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME) CN

CM

CRN 86261-90-7 CMF C9 H14 N2 O3

CM 2

CRN 74092-50-5 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 352-87-4 CMF C6 H7 F3 O2

$$\begin{smallmatrix} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{F}_3\text{C--} & \text{CH}_2\text{--} & \text{O}\text{--} & \text{C}\text{--} & \text{Me} \end{smallmatrix}$$

CRN 141-32-2 CMF C7 H12 O2

$$\begin{array}{c}
O \\ \parallel \\
n-BuO-C-CH \longrightarrow CH_2
\end{array}$$

CM 5

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \mathbf{O} \\ || \\ \mathbf{CH_2} - \mathbf{O} - \mathbf{C} - \mathbf{CH} = \mathbf{CH_2} \\ || \\ \mathbf{Et} - \mathbf{CH} - \mathbf{Bu-n} \end{array}$$

CM 6

CRN 100-42-5 CMF C8 H8

$$H_2C = CH - Ph$$

CM 7

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c} ^{H_2C} \quad \text{O} \\ \parallel \quad \parallel \\ \text{Me-} \quad \text{C-} \quad \text{C-} \quad \text{OMe} \end{array}$$

CM 8

CRN 79-41-4 CMF C4 H6 O2

CM 9

```
CRN 79-10-7
CMF C3 H4 O2
```

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HO-C-CH=CH2
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ICM C08K003-00 IC

INCL 524556000; 526319000

37-3 (Plastics Manufacture and Processing)

ST trifluoroalkyl alkylimidazolidone acrylate copolymer pressure sensitive adhesive

IT Adhesives

(pressure-sensitive; water-whitening resistant

pressure-sensitive adhesive)

IT 861509-70-8P 861509-72-0P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(water-whitening resistant pressure-sensitive adhesive)

L227 ANSWER 5 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:735078 HCAPLUS <<LOGINID::20060124>>

DOCUMENT NUMBER: 143:178424

TITLE: Gel/air freshener system

INVENTOR(S): Conover, Donald

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 3 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005175578	A1	20050811	US 2005-37278	2005
PRIORITY APPLN. INFO.:			US 2004-543581P P	0118 2004 0211
			US 2004-548244P P	2004

AB A powder mixture for mixing with water to form a gel for a gel/air freshener system includes a fragrance, amorphous fumed silica, a super-absorbent polymer and a surfactant. The mixture can also include a dye and a deodorizer, which may replace a portion of the fragrance or be in combination with the fragrance.

IT 132893-93-7, Norsocryl

RL: NUU (Other use, unclassified); USES (Uses)

(gel/air freshener system)

RN 132893-93-7 HCAPLUS

```
Norsocryl (9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
    ICM A61L009-00
      ICS A61L009-01; A61L009-04
INCL 424076100
CC
      59-6 (Air Pollution and Industrial Hygiene)
      7631-86-9, Silica, uses 9003-04-7, Sodium polyacrylate 25155-30-0, Nacconol 90G 132893-93-7, Norsocryl
      306275-73-0, Ordenone 847678-26-6, Norsocryl XFS
      RL: NUU (Other use, unclassified); USES (Uses)
          (gel/air freshener system)
L227 ANSWER 6 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN
                             2005:638911 HCAPLUS <<LOGINID::20060124>>
ACCESSION NUMBER:
DOCUMENT NUMBER:
                              143:116279
TITLE:
                             Method for the preparation of resin-reinforced
                             aqueous polymeric dispersions
INVENTOR(S):
                              Do Amaral, Marcelo; Asua Gonzalez, Jose Maria
PATENT ASSIGNEE(S):
                             Universidad Del Pais Vasco Euskal Herriko
                             Unibertsitatea, Spain
SOURCE:
                              PCT Int. Appl., 30 pp.
                              CODEN: PIXXD2
DOCUMENT TYPE:
                              Patent
                              Spanish
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                       KIND DATE
      PATENT NO.
                                                   APPLICATION NO.
                                                                                 DATE
                             ----
                                    -----
                                                    -----
      WO 2005066217
                             A1
                                      20050721 WO 2005-ES4
                                                                                 2005
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG,
               ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,
               KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
          MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
               ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH,
               CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT,
               LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
27 A1 20050716 ES 2004-21
      ES 2237327
                                                                                 2004
                                                                                 0107
PRIORITY APPLN. INFO.:
                                                    ES 2004-21
                                                                             Α
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AB The method comprises a miniemulsion polymerization step and an emulsion polymerization step to produce reinforced aqueous polymeric dispersions having improved mech., phys., and colloidal properties. The miniemulsion polymerization mixture contains at least one amphiphilic polymer as stabilizer, a hydrophobic stabilizer, and at least one $\alpha,\beta\text{-unsatd}$. monomer, e.g., vinyl, (meth)acrylic, styrenic, and polymerization produces polymer drops in aqueous dispersion. The emulsion polymerization consists of mixing the aqueous dispersion from the miniemulsion polymerization step and at least one unsatd. ethylenic

2004 0107

monomer, an stabilizer, and at least one free radical initiator to effect polymerization. The resulting reinforced latexes have high solids content, adequate viscosity, dispersibility, and substrate wetting, and intensified lustre, pigment wetting dispersibility, penetration resistance, high mech. and shear stability, high stability to freezing/thawing and high polymer volume content. reinforced latexes are suitable for use as binders in paints for art applications and in coating formulations. 132893-93-7, Norsocryl RL: TEM (Technical or engineered material use); USES (Uses) (C18-22, acrylic polymer, binder component; mini-emulsion and emulsion polymerization sequence in preparation of water soluble acrylic resin latex for binder uses) 132893-93-7 HCAPLUS Norsocryl (9CI) (CA INDEX NAME) *** STRUCTURE DIAGRAM IS NOT AVAILABLE *** ICM C08F002-22 ICS C08F002-24 37-6 (Plastics Manufacture and Processing) Section cross-reference(s): 42 132893-93-7, Norsocryl RL: TEM (Technical or engineered material use); USES (Uses) (C18-22, acrylic polymer, binder component; mini-emulsion and emulsion polymerization sequence in preparation of water soluble acrylic resin latex for binder uses) REFERENCE COUNT: THERE ARE 3 CITED REFERENCES AVAILABLE 3 FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L227 ANSWER 7 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2004:822890 HCAPLUS <<LOGINID::20060124>> DOCUMENT NUMBER: 141:315120 TITLE: Emulsifier compositions containing diphenyl ether derivatives INVENTOR(S): Van Es, Steven; Dupont, Olivier PATENT ASSIGNEE(S): UCB S.A., Belg. Eur. Pat. Appl., 20 pp. SOURCE: CODEN: EPXXDW DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION: P. E

ΙT

RN

CN

IC

CC

PATENT NO.		KIND	DATE	APPLICATION NO.	DATE
					-
EP 1464656		A1	20041006	EP 2003-7782	2003 0404
MC				BB, GR, IT, LI, LU, NL RO, MK, CY, AL, TR, BG	SE,
CA 2521180		AA	20041014	CA 2004-2521180	
					2004 0402
WO 2004087	769	A1	20041014	WO 2004-EP3546	2004
					2004 0402
CA	CH, CN,	CO, CR,	CU, CZ, D	BA, BB, BG, BR, BW, BY DE, DK, DM, DZ, EC, EE RR, HU, ID, IL, IN, IS	EG,

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KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL,
                  PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,
                  TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
            RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW,
                  AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY,
                  CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
       EP 1613664
                                    A1
                                             20060111
                                                              EP 2004-725361
                                                                                               2004
                                                                                               0402
            R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ,
                  EE, HU, PL, SK, HR
PRIORITY APPLN. INFO.:
                                                              EP 2003-7782
                                                                                               2003
                                                                                               0404
                                                              WO 2004-EP3546
                                                                                               2004
                                                                                               0402
```

OTHER SOURCE(S): GT

MARPAT 141:315120

AB The invention relates to an emulsifier mixture comprising of at least one emulsifier I, wherein one or two of R1 to R6 groups are SO3M, one or two of R1 to R6 groups are a C1-18 alkyl group and M is a cation, and of at least one emulsifier chosen from linear or branched alkyl ether sulfates, and its use in aqueous polymer dispersions and emulsion polymns. for manufacture of pressure -sensitive adhesives in for transparent adhesive films. A typical dispersion was manufactured by emulsion polymerization of 2-ethylhexyl acrylate (II), styrene, Et acrylate , Me acrylate, methacrylic acid, acrylic acid (III), and ethylimidazolidone methacrylate in the presence of (NH4)2S2O8, Luperox H70, Rongalit C, biocide, Na2CO3.2H2O, Fe(NO3)3, Rhodapex L12 (fatty alc. ether sulfate, Na salt, ethylene oxide d.p. 12, alkyl radical C12-18), Ufapol DMA PS2 (mixture of mono- and dialkyl disulfonated di-Ph oxide, disodium salt), and a seed prepared by polymerization of II, Bu acrylate, styrene, and III. IT

768383-82-0P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(emulsifier compns. containing di-Ph ether alkyl derivs. sulfonate salts and alkyl ether sulfates for emulsion polymerization of acrylic monomers in manufacture of transparent adhesives for films)

RN 768383-82-0 HCAPLUS

2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,

ethenylbenzene, 2-ethylhexyl 2-propenoate, ethyl 2-propenoate, methyl 2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 86261-90-7 CMF C9 H14 N2 O3

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 140-88-5 CMF C5 H8 O2

CM 4

CRN 103-11-7 CMF C11 H20 O2

CM 5

CRN 100-42-5 CMF C8 H8 $H_2C = CH - Ph$

6 CM

CRN 96-33-3 CMF C4 H6 O2

CM

79-41-4 CRN C4 H6 O2

CM 8

CRN 79-10-7 CMF C3 H4 O2

$$\begin{matrix} \text{O} \\ || \\ \text{HO-C-CH} \end{matrix} = \text{CH}_2$$

IC ICM C08F002-26 ICS C09J133-06

CC 37-3 (Plastics Manufacture and Processing)

Section cross-reference(s): 38

ST diphenyl ether deriv emulsifier acrylic polymn transparent adhesive manuf; polyoxyethylene ether sulfate emulsifier transparent pressure sensitive adhesive; ethylimidazolidone methacrylate copolymer manuf transparent pressure sensitive adhesive; methacrylic copolymer manuf transparent pressure sensitive adhesive; styrene acrylic copolymer manuf transparent pressure sensitive adhesive; acrylate copolymer manuf transparent pressure sensitive adhesive; alkyl ether sulfate emulsifier acrylic polymn transparent adhesive manuf

ΙT Adhesives

> (pressure-sensitive, water-thinned; emulsifier compns. containing di-Ph ether alkyl derivs. sulfonate salts and alkyl ether sulfates for emulsion polymerization of acrylic monomers in manufacture of transparent adhesives for films)

IT 768383-82-0P

RL: IMF (Industrial manufacture); TEM (Technical or engineered

material use); PREP (Preparation); USES (Uses)
 (emulsifier compns. containing di-Ph ether alkyl derivs. sulfonate
 salts and alkyl ether sulfates for emulsion polymerization of acrylic
 monomers in manufacture of transparent adhesives for films)

L227 ANSWER 8 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:663446 HCAPLUS <<LOGINID::20060124>>

DOCUMENT NUMBER: 141:314925

TITLE: Effect of the particle size distribution on

the low shear viscosity of high-solid-content

latexes

AUTHOR(S): do Amaral, Marcelo; van Es, Steven; Asua, Jose

Μ.

CORPORATE SOURCE: Institute for Polymer Materials and Grupo de

Ingenieria Quimica, Facultad de Ciencias Quimicas, University of the Basque Country, Donostia-San Sebastian, 20080, Spain

SOURCE: Journal of Polymer Science, Part A: Polymer

Chemistry (2004), 42(16), 3936-3946

CODEN: JPACEC; ISSN: 0887-624X

PUBLISHER: John Wiley & Sons, Inc.

DOCUMENT TYPE: Journal LANGUAGE: English

AB The production of high-solid-content, low-viscosity latexes is an active field in both industry and academia. The viscosity of polymer dispersions has a clear dependence on the particle size distribution (PSD). An example is the rule of thumb that a bimodal PSD enables the reduction of the viscosity with respect to monomodal systems. Despite important progress in theor. work, not much was done to quant. predict the low shear viscosity of aqueous polymer dispersions as a function of the complex PSD. In this work, the capability of a low-shear-viscosity equation to quant. account for the influence of both the PSD and the physicochem. characteristics of the dispersions is exptl. assessed. An anal., consistent with theor. concepts, of the data with semiempirical correlations is proposed. Next, with values of the parameters of the viscosity equation obtained exptl., the effect of a latex with

a 70% solid content on the low shear viscosity is examined IT 132893-93-7, Norsocryl

RL: NUU (Other use, unclassified); USES (Uses)

(co-stabilizer; particle size distribution effects on low shear viscosity of high-solid-content polymer dispersions)

RN 132893-93-7 HCAPLUS

CN Norsocryl (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CC 36-7 (Physical Properties of Synthetic High Polymers)

IT 544-76-3, Hexadecane 132893-93-7, Norsocryl RL: NUU (Other use, unclassified); USES (Uses)

(co-stabilizer; particle size distribution effects on low shear

viscosity of high-solid-content polymer dispersions)

REFERENCE COUNT: 49 THERE ARE 49 CITED REFERENCES AVAILABLE

FOR THIS RECORD. ALL CITATIONS AVAILABLE

IN THE RE FORMAT

L227 ANSWER 9 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:606956 HCAPLUS <<LOGINID::20060124>>

DOCUMENT NUMBER: 141:144585

TITLE: Additives for building materials based on

hydraulic binders

AUTHOR(S): Anon. CORPORATE SOURCE: UK

SOURCE: Research Disclosure (2004), 482(June),

P830-P831 (No. 482090)

CODEN: RSDSBB; ISSN: 0374-4353 Kenneth Mason Publications Ltd.

DOCUMENT TYPE: Journal; Patent

LANGUAGE: German

PATENT INFORMATION:

PUBLISHER:

KIND DATE PATENT NO. APPLICATION NO. DATE _____

RD 482090 20040610

PRIORITY APPLN. INFO.: RD 2004-482090

20040610

The composition of either copolymer aqueous dispersions or powders are presented, which application results in strength and flexibility improvement especially at low temps. The composition containing: (a) 40-80% at least of an acrylate with C2-C12 alkanoles, (b) 10-40% at least of a vinyl-aromatic monomer and/or methacrylate with C1-C4 alkanoles, (c) 0.1-9.9% at least of an acrylate or methacrylate with C2-C10

alkanoles, (d) 0.1-5% of an ethylimidazolidone

acrylate and/or ethylimidazolidone

methacrylate, (e) at most 1% of an ethylenically unsatd. monomers, (f) less than 5% of an α,β -ethylenically unsatd. nitriles, and (g) less than 1% of an amide of α, β -ethylenically unsatd. mono- or dicarboxylic acid.

CC 58-1 (Cement, Concrete, and Related Building Materials) Section cross-reference(s): 38

ST hydraulic binder additive copolymer acrylate methacrylate; cement mortar hydraulic binder

10344-93-1, Acrylate, uses 18358-13-9,

Methacrylate, uses

RL: NUU (Other use, unclassified); USES (Uses)

(additives for building materials based on hydraulic binders)

L227 ANSWER 10 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:470349 HCAPLUS <<LOGINID::20060124>>

DOCUMENT NUMBER: 141:24789

TITLE: Aqueous polymer dispersions, their manufacture

and use as pressure sensitive

adhesives

INVENTOR(S): Van Es, Steven; Dupont, Olivier; Segers, Willy

PATENT ASSIGNEE(S): UCB S.A., Belg.

SOURCE: Eur. Pat. Appl., 17 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

KIND DATE APPLICATION NO. PATENT NO. DATE ----------

EP 1426428 A1 20040609 EP 2002-27263

2002

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ,

EE, SK

CA 2507132 AA 20040624 CA 2003-2507132

2003

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1201
                                              WO 2003-EP13496
     WO 2004053011
                           A1
                                  20040624
                                                                       2003
                                                                       1201
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ,
             CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,
             KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
             MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT,
             RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT,
             TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY,
             CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
             NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA,
             GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                 20050907
     EP 1570019
                           A1
                                              EP 2003-782259
                                                                       2003
                                                                       1201
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
             MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ,
             EE, HU, SK
PRIORITY APPLN. INFO.:
                                              EP 2002-27263
                                                                       2002
                                                                       1206
                                              WO 2003-EP13496
                                                                       2003
                                                                       1201
AB
     The aqueous polymer dispersions contain specific copolymers which are
     composed of ≥4 different ethylenically unsatd. monomers.
     More specifically the copolymers comprise 5-92.5% ≥1 alkyl
     acrylate the homopolymers of which have a Tg
     ≤-40° (constituent a), 2.5-30% ≥1 alkyl
     (meth)acrylate the homopolymers of which have a Tg -25
     to 0° (constituent b), 2.5-30% ≥1 alkyl (meth)
     acrylate the homopolymers of which have a Tg 0-20°
     (constituent c), 2.5-30% ≥1 ethylenically unsatd. monomer
     the homopolymers of which have a Tg ≥20° and which
     do not contain a functional group selected from hydroxy, acid,
     acid anhydride, nitro, epoxy and amino groups (constituent d),
     0-10% ≥1 ethylenically unsatd. monomer having ≥1
     acid group or acid anhydride group (constituent e), and 0-60%
     ≥1 ethylenically unsatd. monomer having either no further
     functional group or in addition to the ethylenically unsatd. group
     ≥1 functional group other than an acid group or an acid
     anhydride group (constituent f).
TT
     697799-11-4P, Acrylic acid-butyl acrylate-ethyl
     acrylate-2-ethylhexyl acrylate-N-(2-(2-oxo-1-
     imidazolidinyl) ethyl) methacrylate
     -methacrylic acid-methyl acrylate-methyl
     methacrylate-styrene copolymer
     RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical
     or engineered material use); PREP (Preparation); USES (Uses)
        (aqueous polymer dispersions as pressure sensitive
        adhesives having low water whitening characteristics,
        high shear strength, excellent peel strength and loop tack)
RN
     697799-11-4 HCAPLUS
CN
     2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,
     ethenylbenzene, 2-ethylhexyl 2-propenoate, ethyl 2-propenoate,
     methyl 2-methyl-2-propenoate, methyl 2-propenoate,
```

2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 86261-90-7 CMF C9 H14 N2 O3

$$\begin{array}{c|c} H & O & \\ \hline & N & O & CH_2 \\ \hline & || & || & \\ \hline & CH_2-CH_2-O-C-C-Me \\ \end{array}$$

CM 2

CRN 141-32-2 CMF C7 H12 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{n-BuO-C-CH-----} \text{CH}_2 \end{array}$$

CM 3

CRN 140-88-5 CMF C5 H8 O2

CM 4

CRN 103-11-7 CMF C11 H20 O2

CM 5

CRN 100-42-5 CMF C8 H8 $H_2C == CH - Ph$

CM 6

CRN 96-33-3 CMF C4 H6 O2

CM 7

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{ccc} ^{\text{H}_2\text{C}} & \text{O} \\ & \parallel & \parallel \\ \text{Me-C-C-OMe} \end{array}$$

CM 8

CRN 79-41-4 CMF C4 H6 O2

$$\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me-C-CO}_2 \text{H} \end{array}$$

CM 9

CRN 79-10-7 CMF C3 H4 O2

 ethyl 2-propenoate and methyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 140-88-5 CMF C5 H8 O2

CM 2

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \circ \\ || \\ \mathsf{CH}_2 - \mathsf{O} - \mathsf{C} - \mathsf{CH} == \mathsf{CH}_2 \\ || \\ \mathsf{Et} - \mathsf{CH} - \mathsf{Bu} - \mathsf{n} \end{array}$$

CM 3

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CM 4

CRN 96-33-3 CMF C4 H6 O2

RN 697799-12-5 HCAPLUS

CN 2-Propenoic acid, ethyl ester, polymer with 2-ethylhexyl 2-propenoate and methyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 140-88-5 CMF C5 H8 O2

```
Eto- C- CH= CH2
           2
     CM
     CRN 103-11-7
     CMF C11 H20 O2
    CH2-O-C-CH=CH2
Et-CH-Bu-n
     CM
          3
     CRN 96-33-3
     CMF C4 H6 O2
MeO-C-CH-CH2
IC
     ICM C09J133-08
     ICS C08F220-10
CC
     38-3 (Plastics Fabrication and Uses)
ST
     adhesive pressure sensitive aq dispersion
IT
     Adhesives
        (pressure-sensitive; aqueous polymer dispersions as
        pressure sensitive adhesives having low water
        whitening characteristics, high shear strength, excellent peel
        strength and loop tack)
IT
     697799-11-4P, Acrylic acid-butyl acrylate-ethyl
     acrylate-2-ethylhexyl acrylate-N-(2-(2-oxo-1-
     imidazolidinyl)ethyl) methacrylate
     -methacrylic acid-methyl acrylate-methyl
     methacrylate-styrene copolymer
     RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical
     or engineered material use); PREP (Preparation); USES (Uses)
        (aqueous polymer dispersions as pressure sensitive
        adhesives having low water whitening characteristics,
high shear strength, excellent peel strength and loop tack)
     149729-49-7P, Ethyl acrylate-2-ethylhexyl
     acrylate-methyl acrylate-styrene copolymer
     697799-12-5P, Ethyl acrylate-2-ethylhexyl
     acrylate-methyl acrylate copolymer
     RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
        (aqueous polymer dispersions as pressure sensitive
        adhesives having low water whitening characteristics,
        high shear strength, excellent peel strength and loop tack)
                                 THERE ARE 3 CITED REFERENCES AVAILABLE
REFERENCE COUNT:
                          3
                                 FOR THIS RECORD. ALL CITATIONS AVAILABLE
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IN THE RE FORMAT

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L227 ANSWER 11 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                            2004:292058 HCAPLUS <<LOGINID::20060124>>
DOCUMENT NUMBER:
                             140:305082
TITLE:
                             Removable water-whitening resistant
                             pressure-sensitive acrylic
                             adhesives
INVENTOR(S):
                             Guo, Jong-shing; Chen, Augustin T.; Trembley,
                             Sharon D.
PATENT ASSIGNEE(S):
                             Ucb, S.A., Belg.
                             PCT Int. Appl., 37 pp.
SOURCE:
                             CODEN: PIXXD2
DOCUMENT TYPE:
                             Patent
LANGUAGE:
                             English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
     PATENT NO.
                            KIND
                                     DATE
                                                  APPLICATION NO.
                                                                              DATE
                                                   -----
                            ----
                                     -----
     WO 2004029171 A1
                                     20040408 WO 2003-US30412
                                                                              2003
                                                                              0925
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA,
               CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI,
               GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,
              KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA,
               UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
              AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     CA 2499815
                                    20040408
                                                   CA 2003-2499815
                              AA
                                                                              2003
                                                                              0925
     US 2004116598
                             A1
                                     20040617 US 2003-671095
                                                                              2003
                                                                              0925
     EP 1546279
                             A1
                                     20050629 EP 2003-770483
                                                                              2003
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
              MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ,
               EE, HU, SK
     JP 2006501328
                             Т2
                                     20060112 JP 2004-539976
                                                                              2003
                                                                              0925
PRIORITY APPLN. INFO.:
                                                  US 2002-413846P
                                                                              2002
                                                                              0926
                                                   WO 2003-US30412
                                                                              2003
                                                                              0925
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AB Title pressure-sensitive adhesive
(PSA) having a peel strength <2.5 lb per in. comprises a
crosslinked aqueous emulsion polymer containing 50-90 weight%

hydrophobic monomers selected from alkyl (meth)acrylate and styrenic monomers, 2-10 weight% hydrophilic monomers, and 5-25 weight% partially hydrophilic monomers selected from C1-2 alkyl (meth)acrylate and N-vinyl-2-pyrrolidone, a polyfunctional aziridine crosslinking agent, such as N-aminoethyl-N-aziridinylethylamine and N,N-bis-2-aminopropyl-Naziridinylethyl amine, and a non-polymerizable and polymerizable surfactant, such as allyl amine salt of an alkyl benzene sulfoante or a polyoxyalkylene-1-(allyloxymethyl)alkyl ether sulfate salt. Thus, acrylic acid, Bu acrylate, 2-ethylhexyl acrylate, methacrylic acid, Me acrylate, and Me methacrylate were emulsion polymerization using ammonium lauryl ether sulfate surfactant, and then crosslinked with trimethylolpropane tris(β -N-aziridinyl)propionate (CX 100) to obtain a PSA. 676515-48-3P 676515-49-4P RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (removable water-whitening resistant pressuresensitive acrylic adhesives) 676515-48-3 HCAPLUS 1-Aziridinepropanoic acid, 2-methyl-, 2-ethyl-2-[[3-(2-methyl-1aziridinyl)-1-oxopropoxylmethyl]-1,3-propanediyl ester, polymer with butyl 2-propenoate, 2-ethylhexyl 2-propenoate, methyl 2-methyl-2-propenoate, methyl 2-propenoate, 2-methyl-2-propenoic acid and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

IT

RN

CN

CRN 64265-57-2 CMF C24 H41 N3 O6

Me
$$CH_2 - CH_2 - CH_2$$

CM 2

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{CH}_2\text{--O-C-CH} \end{array} \\ \text{CH}_2 \\ \text{Et-CH-Bu-n} \end{array}$$

CM 4

CRN 96-33-3 CMF C4 H6 O2

$$\begin{matrix} \text{O} \\ || \\ \text{MeO-C-CH------} \text{CH}_2 \end{matrix}$$

CM 5

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{ccc} ^{H_2C} & \text{O} \\ \parallel & \parallel \\ \text{Me-} & \text{C-} & \text{C-} & \text{OMe} \end{array}$$

CM 6

CRN 79-41-4 CMF C4 H6 O2

$$\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me-} \text{C-} \text{CO}_2 \text{H} \end{array}$$

CM 7

CRN 79-10-7 CMF C3 H4 O2

RN 676515-49-4 HCAPLUS

CN 1-Aziridinepropanoic acid, 2-methyl-, 2-ethyl-2-[[3-(2-methyl-1-aziridinyl)-1-oxopropoxy]methyl]-1,3-propanediyl ester, polymer with butyl 2-propenoate, 2-ethylhexyl 2-propenoate, methyl 2-propenoate, 2-methyl-2-propenoic acid, 2-propenoic acid and α -sulfo- ω -[4-nonyl-2-(1-propenyl)phenoxy]poly(oxy-1,2-ethanediyl) ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 140651-97-4 CMF (C2 H4 O)n C18 H28 O4 S . H3 N CCI PMS

$$_{\mathrm{HO_{3}S}}$$
 $_{\mathrm{CH_{2}-CH_{$

● NH3

CM 2

CRN 64265-57-2 CMF C24 H41 N3 O6

CRN 141-32-2 CMF C7 H12 O2

$$\begin{matrix} \begin{smallmatrix} 0 \\ \parallel \\ n\text{-BuO-C-CH} \end{smallmatrix} CH_2$$

CM 4

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{CH}_2-\text{O-C-CH} \end{array} \text{CH}_2 \\ \parallel \\ \text{Et-CH-Bu-n} \end{array}$$

CM 5

CRN 96-33-3 CMF C4 H6 O2

CM 6

CRN 79-41-4 CMF C4 H6 O2

CM 7

CRN 79-10-7 CMF C3 H4 O2

IC ICM C09J133-06

```
38-3 (Plastics Fabrication and Uses)
ST
    acrylic acid butyl ethylhexyl methyl acrylate
    methacrylate aziridine adhesive
IT
    Polyoxyalkylenes, uses
    RL: IMF (Industrial manufacture); POF (Polymer in formulation);
     TEM (Technical or engineered material use); PREP (Preparation);
        (acrylic; removable water-whitening resistant pressure
        -sensitive acrylic adhesives)
IT
    Polymerization
        (emulsion, radical; removable water-whitening resistant
       pressure-sensitive acrylic adhesives
IT
    Adhesives
        (pressure-sensitive; removable
       water-whitening resistant pressure-sensitive
       acrylic adhesives)
IT
    Crosslinking agents
       Surfactants
        (removable water-whitening resistant pressure-
       sensitive acrylic adhesives)
    32612-48-9, Ammonium lauryl ether sulfate
IT
    RL: NUU (Other use, unclassified); USES (Uses)
        (emulsifier; removable water-whitening resistant
       pressure-sensitive acrylic adhesives
TТ
    676515-48-3P 676515-49-4P
    RL: IMF (Industrial manufacture); POF (Polymer in formulation);
    TEM (Technical or engineered material use); PREP (Preparation);
    USES (Uses)
        (removable water-whitening resistant pressure-
       sensitive acrylic adhesives)
                              THERE ARE 4 CITED REFERENCES AVAILABLE
REFERENCE COUNT:
                              FOR THIS RECORD. ALL CITATIONS AVAILABLE
                              IN THE RE FORMAT
L227 ANSWER 12 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN
                        ACCESSION NUMBER:
DOCUMENT NUMBER:
                        140:201103
                        Use of gradient copolymers as dispersing agent
TITLE:
                        for the treatment of pigments and solids
INVENTOR(S):
                        Goebelt, Bernd; Haubennestel, Karlheinz;
                        Krappe, Udo; Della Valentina, Petra
                        BYK-Chemie G.m.b.H., Germany
PATENT ASSIGNEE(S):
SOURCE:
                        Ger. Offen., 17 pp.
                        CODEN: GWXXBX
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        German
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
    PATENT NO.
                                                                  DATE
                        KIND
                               DATE
                                           APPLICATION NO.
     _____
    DE 10236133
                         A1
                               20040226
                                           DE 2002-10236133
                                                                  2002
                                                                  0807
    TW 592794
                                           TW 2003-92119040
                         В
                               20040621
                                                                 2003
                                                                  0711
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CA 2435516

AA

20040207

CA 2003-2435516

2003

Sastri 10/774,617

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0718
      EP 1416019
                              A1
                                      20040506
                                                    EP 2003-17316
                                                                                2003
                                                                                0731
      EP 1416019
                                      20050518
                              B1
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ,
               EE, HU, SK
      AT 295871
                                      20050615
                                                    AT 2003-17316
                                                                                2003
                                                                                0731
      ES 2240896
                                      20051016
                                                    ES 2003-3017316
                                                                                2003
                                                                                0731
     JP 2004066235
                                      20040304
                                                    JP 2003-287916
                                                                                2003
                                                                                0806
     CN 1495204
                                      20040512
                                                    CN 2003-158622
                                                                                2003
                                                                                0807
     US 2004143035
                              A1
                                      20040722
                                                    US 2003-636319
                                                                                2003
                                                                                0807
PRIORITY APPLN. INFO.:
                                                    DE 2002-10236133
                                                                                2002
                                                                                0807
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AB Copolymers are manufactured by continuously living, controlled polymerization of ethylenically unsatd. compds. in the presence of nonpolymeric monofunctional initiators in such a way that the products exhibit a gradual hydrophilicity to hydrophobicity along the chains. These copolymers are post-treated to give dispersing agents for pigments in coatings and fillers in plastics,. A typical dispersant was manufactured by heating 3.3 mL benzenesulfonyl chloride, 103 g Bu methacrylate, 1 g 2,2'-bipyridine and 400 mg Cu powder in 25 mL methoxypropyl acetate (I) to 100°, adding 65 g N, N'-dimethylaminoethyl methacrylate at 0.8 mL/min, heating 5 min at 100° heating 168 g polymer 2 h at 100° with 52 g benzyl chloride in 150 g each I and ethylene glycol mono-Bu ether until the reaction was complete. IT 24938-16-7P, Butyl methacrylate -N, N-dimethylaminoethyl methacrylate-methyl methacrylate copolymer 25702-92-5P, Butyl methacrylate-2-hydroxyethyl methacrylate copolymer 25951-87-5P, Butyl methacrylate -glycidyl methacrylate copolymer 26658-83-3P, Butyl methacrylate-N, N-dimethylaminoethyl methacrylate copolymer 28549-52-2P, Butyl methacrylate-tert-butyl methacrylate copolymer 143363-32-0P, Butyl methacrylate -N, N-dimethylaminoethyl methacrylate-2-ethylhexyl methacrylate copolymer 661478-14-4P, Butyl methacrylate-1-(2-methacryloyloxyethyl)-2-imidazolidinone methacrylate copolymer RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent) (dispersant precursor; use of copolymers with hydrophilicity-hydrophobicity gradient along chains as dispersing agents for pigments and fillers) RN 24938-16-7 HCAPLUS CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with

2-(dimethylamino)ethyl 2-methyl-2-propenoate and methyl

2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 2867-47-2 CMF C8 H15 N O2

$$\begin{array}{c} \text{O} \quad \text{CH}_2 \\ \parallel \quad \parallel \\ \text{Me}_2 \text{N} - \text{CH}_2 - \text{CH}_2 - \text{O} - \text{C} - \text{C} - \text{Me} \end{array}$$

CM 2

CRN 97-88-1 CMF C8 H14 O2

CM 3

CRN 80-62-6 CMF C5 H8 O2

RN 25702-92-5 HCAPLUS

2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 868-77-9 CMF C6 H10 O3

CM 2

CRN 97-88-1 CMF C8 H14 O2

RN

25951-87-5 HCAPLUS 2-Propenoic acid, 2-methyl-, butyl ester, polymer with CNoxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

106-91-2 CRN CMF C7 H10 O3

$$\overset{\text{O}}{\underset{\text{CH}_2-\text{O-C-C-Me}}{||}} \overset{\text{O}}{\underset{\text{CH}_2}{||}}$$

2 CM

97-88-1 CRN CMF C8 H14 O2

$$\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{n-BuO-C-C-Me} \end{array}$$

RN 26658-83-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 2867-47-2 CMF C8 H15 N O2

2 CM

CRN 97-88-1 CMF C8 H14 O2

28549-52-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 1,1-dimethylethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 585-07-9 CMF C8 H14 O2

$$\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{t-BuO-C-C-Me} \end{array}$$

CM 2

CRN 97-88-1 CMF C8 H14 O2

$$\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{n-BuO-C-C-Me} \end{array}$$

CN

RN 143363-32-0 HCAPLUS

2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate and 2-ethylhexyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 2867-47-2 CMF C8 H15 N O2

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ & || & || \\ \text{Me}_2\text{N}-\text{CH}_2-\text{CH}_2-\text{O}-\text{C}-\text{C}-\text{Me} \end{array}$$

CM 2

CRN 688-84-6 CMF C12 H22 O2

$$\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{CH}_2 - \text{O} - \text{C} - \text{C} - \text{Me} \\ \parallel \\ \text{Et} - \text{CH} - \text{Bu-n} \end{array}$$

CM 3

CRN 97-88-1 CMF C8 H14 O2

```
661478-14-4 HCAPLUS
     2-Propenoic acid, 2-methyl-, butyl ester, polymer with
CN
     2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate (9CI) (CA
     INDEX NAME)
     CM
          1
     CRN 86261-90-7
     CMF C9 H14 N2 O3
                     CH<sub>2</sub>
          - CH2-O-C-C-Me
          2
     CRN 97-88-1
     CMF C8 H14 O2
         CH<sub>2</sub>
IT
     25702-92-5DP, Butyl methacrylate-2-hydroxyethyl
     methacrylate copolymer, esters with polyphosphoric acids
     28549-52-2DP, Butyl methacrylate-tert-butyl
     methacrylate copolymer, hydrolyzed 146267-18-7P, Butyl methacrylate-N,N-dimethylaminoethyl
     methacrylate copolymer benzyl chloride salt
     661478-15-5P, Butyl methacrylate
     -N, N-dimethylaminoethyl methacrylate-methyl
     methacrylate copolymer benzyl chloride salt
     661478-16-6P, Butyl methacrylate
     -N, N-dimethylaminoethyl methacrylate-2-ethylhexyl
     methacrylate copolymer benzyl chloride salt
     663152-70-3P, Butyl methacrylate-glycidyl
     methacrylate copolymer p-nitrobenzoate
     RL: IMF (Industrial manufacture); MOA (Modifier or additive use);
     TEM (Technical or engineered material use); PREP (Preparation);
     USES (Uses)
        (dispersant; use of copolymers with hydrophilicity-
        hydrophobicity gradient along chains as dispersing agents for
        pigments and fillers)
RN
     25702-92-5 HCAPLUS
CN
     2-Propenoic acid, 2-methyl-, butyl ester, polymer with
     2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)
```

1

CRN 868-77-9 CMF C6 H10 O3

CM 2

CRN 97-88-1 CMF C8 H14 O2

 $\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{n-BuO-C-C-Me} \end{array}$

RN 28549-52-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 1,1-dimethylethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 585-07-9 CMF C8 H14 O2

O CH₂ || || t-BuO-C-C-Me

CM 2

CRN 97-88-1 CMF C8 H14 O2

 $\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{n-BuO-C-C-Me} \end{array}$

RN 146267-18-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, compd. with (chloromethyl)benzene (9CI) (CA INDEX NAME)

CM 1

CRN 100-44-7 CMF C7 H7 Cl

 $Ph-CH_2-Cl$

```
2
      CM
      CRN
           26658-83-3
      CMF
            (C8 H15 N O2 . C8 H14 O2)x
      CCI
            PMS
            CM
                 3
            CRN 2867-47-2
            CMF C8 H15 N O2
                    O CH<sub>2</sub>
\text{Me}_2\text{N--}\text{CH}_2\text{--}\text{CH}_2\text{--}\text{O--}\text{C--}\text{C--}\text{Me}
            CM
           CRN 97-88-1
           CMF C8 H14 O2
       O CH<sub>2</sub>
n-BuO-C-C-Me
     661478-15-5 HCAPLUS
RN
CN
     2-Propenoic acid, 2-methyl-, butyl ester, polymer with
     2-(dimethylamino)ethyl 2-methyl-2-propenoate and methyl
     2-methyl-2-propenoate, compd. with (chloromethyl)benzene (9CI)
      (CA INDEX NAME)
     CM
           1
     CRN 100-44-7
     CMF C7 H7 Cl
Ph-CH_2-Cl
     CM
           2
     CRN
           24938-16-7
     CMF
            (C8 H15 N O2 . C8 H14 O2 . C5 H8 O2)x
     CCI PMS
           CM
                 3
```

CRN 2867-47-2 CMF C8 H15 N O2

CRN 97-88-1 CMF C8 H14 O2

$$\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{n-BuO-C-C-Me} \end{array}$$

CM 5

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{ccc} ^{H_2C} & \text{O} \\ \parallel & \parallel \\ \text{Me-} & \text{C-} & \text{C-} & \text{OMe} \end{array}$$

RN 661478-16-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate and 2-ethylhexyl 2-methyl-2-propenoate, compd. with (chloromethyl)benzene (9CI) (CA INDEX NAME)

CM 1

CRN 100-44-7 CMF C7 H7 Cl

 $Ph-CH_2-Cl$

CM 2

CRN 143363-32-0 CMF (C12 H22 O2 . C8 H15 N O2 . C8 H14 O2) \times

CCI PMS

CM 3

CRN 2867-47-2 CMF C8 H15 N O2

CRN 688-84-6 CMF C12 H22 O2

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{CH}_2 - \text{O} - \text{C} - \text{C} - \text{Me} \\ \parallel & \parallel \\ \text{Et} - \text{CH} - \text{Bu} - \text{n} \end{array}$$

CM 5

CRN 97-88-1 CMF C8 H14 O2

$$\begin{array}{c} \text{O} \quad \text{CH}_2 \\ \parallel \quad \parallel \\ \text{n-BuO-C-C-Me} \end{array}$$

RN 663152-70-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with oxiranylmethyl 2-methyl-2-propenoate, 4-nitrobenzoate (9CI) (CA INDEX NAME)

CM 1

CRN 62-23-7 CMF C7 H5 N O4

CM 2

CRN 25951-87-5

CMF (C8 H14 O2 . C7 H10 O3) \mathbf{x}

CCI PMS

CM 3

CRN 106-91-2 CMF C7 H10 O3

CMF C8 H14 O2 O CH2 Ш n-BuO-C-C-Me ICM B01F017-52 42-6 (Coatings, Inks, and Related Products) Section cross-reference(s): 35, 37 ST acrylic polymer dispersing agent pigment coating; filler plastic acrylic polymer dispersing agent; butyl methacrylate dimethylaminoethyl methacrylate benzyl quaternized manuf TT Polymerization (RAFT; of methacrylate compds. for manufacture of polymers with hydrophilicity-hydrophobicity gradient along chains as dispersing agents for pigments and fillers) TT Polymerization (atom transfer, radical; of methacrylate compds. for manufacture of polymers with hydrophilicity-hydrophobicity gradient along chains as dispersing agents for pigments and fillers) TΤ Polyphosphoric acids RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (esters, with Bu methacrylate-hydroxyethyl methacrylate copolymer, dispersants; use of copolymers with hydrophilicity-hydrophobicity gradient along chains as dispersing agents for pigments and fillers) IT Polymerization (group-transfer; of methacrylate compds. for manufacture of polymers with hydrophilicity-hydrophobicity gradient along chains as dispersing agents for pigments and fillers) IT 24938-16-7P, Butyl methacrylate -N, N-dimethylaminoethyl methacrylate-methyl methacrylate copolymer 25702-92-5P, Butyl methacrylate-2-hydroxyethyl methacrylate copolymer 25951-87-5P, Butyl methacrylate -glycidyl methacrylate copolymer 26658-83-3P, Butyl methacrylate-N, N-dimethylaminoethyl methacrylate copolymer 28549-52-2P, Butyl methacrylate-tert-butyl methacrylate copolymer 143363-32-0P, Butyl methacrylate -N, N-dimethylaminoethyl methacrylate-2-ethylhexyl methacrylate copolymer 661478-14-4P, Butyl methacrylate-1-(2-methacryloyloxyethyl)-2-imidazolidinone methacrylate copolymer RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent) (dispersant precursor; use of copolymers with hydrophilicity-hydrophobicity gradient along chains as dispersing agents for pigments and fillers) IT 25702-92-5DP, Butyl methacrylate-2-hydroxyethyl methacrylate copolymer, esters with polyphosphoric acids 28549-52-2DP, Butyl methacrylate-tert-butyl methacrylate copolymer, hydrolyzed 146267-18-7P,

CM

CRN 97-88-1

```
Butyl methacrylate-N, N-dimethylaminoethyl
methacrylate copolymer benzyl chloride salt 661478-15-5P, Butyl methacrylate
-N, N-dimethylaminoethyl methacrylate-methyl
methacrylate copolymer benzyl chloride salt
661478-16-6P, Butyl methacrylate
-N,N-dimethylaminoethyl methacrylate-2-ethylhexyl
methacrylate copolymer benzyl chloride salt
663152-70-3P, Butyl methacrylate-glycidyl
methacrylate copolymer p-nitrobenzoate
RL: IMF (Industrial manufacture); MOA (Modifier or additive use);
TEM (Technical or engineered material use); PREP (Preparation);
USES (Uses)
   (dispersant; use of copolymers with hydrophilicity-
   hydrophobicity gradient along chains as dispersing agents for
   pigments and fillers)
```

L227 ANSWER 13 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

DOCUMENT NUMBER: 139:262270

Internally plasticized and low-VOC latex TITLE:

compositions and their applications

INVENTOR(S): Thames, Shelby Freland; Wang, Zhiyu; Brister,

Elizabeth H.; Hariharan, Rajan; King, Corey L.; Panjnani, Kamlesh Gopichand University of Southern Mississippi, USA

PATENT ASSIGNEE(S):

SOURCE: U.S., 25 pp., Cont.-in-part of U.S. Ser. No.

773,741.

CODEN: USXXAM

DOCUMENT TYPE:

Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
US 6624223	B1 20030923	US 1999-460946	1999
US 6203720	B1 20010320	US 1996-773741	1214 1996
WO 2001044380	A2 20010621	WO 2000-US33577	1224
			2000 1211
WO 2001044380			
CH, CN, CR, GE, GH, GM, KZ, LC, LK, MX, MZ, NO, TJ, TM, TR, BY, KG, KZ, RW: GH, GM, KE, CH, CY, DE,	CU, CZ, DE, DK, HR, HU, ID, IL, LR, LS, LT, LU, NZ, PL, PT, RO, TT, TZ, UA, UG, MD, RU, TJ, TM LS, MW, MZ, SD, DK, ES, FI, FR, BF, BJ, CF, CG,	BA, BB, BG, BR, BY, BZ, DM, DZ, EE, ES, FI, GB, IN, IS, JP, KE, KG, KP, LV, MA, MD, MG, MK, MN, RU, SD, SE, SG, SI, SK, UZ, VN, YU, ZA, ZW, AM, SL, SZ, TZ, UG, ZW, AT, GB, GR, IE, IT, LU, MC, CI, CM, GA, GN, GW, ML,	GD, KR, MW, SL, AZ, BE, NL,
US 2003045609	A1 20030306	US 2002-118586	2002
US 6897257	B2 20050524		0408

Sastri 10/774,617

PRIORITY APPLN. INFO.:

AB

CN

US 1996-773741 A2 1996 1224 US 1999-460946 A 1999

1214

Title compns. with low odor for use in waterborne coatings, contact and pressure-sensitive adhesives, and inks comprise an aqueous dispersion containing (a) a polymer obtained by polymerization of (i) an internally plasticized and crosslinkable monomer derived from a semi-drying or non-drying oil with ≥1 unsatd. monomers and (ii) ≥1 comonomers, (b) a surfactant, and (c) a drier selected from aliphatic carboxylic acid salts of Co, Mn, Pb, Zr, Ca and mixts. thereof, wherein the total weight% of the polymer in the aqueous dispersion is 5-80%, based on total weight of the composition; and the monomers (i) and (ii) are present in a weight ratio ranging from .apprx.1:2 to .apprx.1:99. The compns. form films at low min. film-forming temps. -5 to 10° and cure to above ambient glass transition (Tg) polymers without the use of traditional organic solvents which contribute to environmental pollution via volatile organic compds. (VOCs) emissions.

IT 224791-01-9P 603956-25-8P 603956-26-9P 603956-27-0P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (internally plasticized and low-VOC latex compns. for coatings, inks, and adhesives)

RN 224791-01-9 HCAPLUS

9-Octadecenoic acid, 12-[(1-oxo-2-propenyl)oxy]-, methyl ester, (9Z,12R)-, polymer with butyl 2-propenoate, methyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 14202-22-3 CMF C22 H38 O4

Absolute stereochemistry. Double bond geometry as shown.

MeO (CH₂)
$$\frac{0}{7}$$
 $\frac{0}{Z}$ R (CH₂) $\frac{1}{5}$ Me

CM 2

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c} ^{\text{H}_2\text{C}} \circ \\ \parallel \ \parallel \\ \text{Me--C--C--OMe} \end{array}$$

CM 4

CRN 79-41-4 CMF C4 H6 O2

RN 603956-25-8 HCAPLUS

CN 9-Octadecenoic acid, 12-[(1-oxo-2-propenyl)oxy]-, methyl ester,
 (9Z,12R)-, polymer with butyl 2-propenoate and ethenylbenzene
 (9CI) (CA INDEX NAME)

CM 1

CRN 14202-22-3 CMF C22 H38 O4

Absolute stereochemistry.

Double bond geometry as shown.

MeO (CH₂)
$$7$$
 \overline{Z} R (CH₂) $\overline{5}$ Me

CM 2

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

RN 603956-26-9 HCAPLUS

CN 9-Octadecenoic acid, 12-[(1-oxo-2-propenyl)oxy]-, methyl ester, (9Z,12R)-, polymer with butyl 2-propenoate, 2-hydroxy-1-(2-propenyloxy)-1-propanesulfonic acid monosodium salt, methyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 143187-46-6 CMF C6 H12 O5 S . Na

Na

CM 2

CRN 14202-22-3 CMF C22 H38 O4

Absolute stereochemistry. Double bond geometry as shown.

MeO
$$(CH_2)$$
 7 Z R (CH_2) 5 Me

CM 3

01/25/2006

CM

CRN 80-62-6 CMF C5 H8 O2

CM

CRN 79-10-7 CMF C3 H4 O2

CN

RN

603956-27-0 HCAPLUS
11-Eicosenoic acid, 14-[(1-oxo-2-propenyl)oxy]-, methyl ester,
(11Z,14R)-, polymer with butyl 2-propenoate, ethenyl acetate and
ethenyl tert-decanoate (9CI) (CA INDEX NAME)

CM 1

CRN 330197-62-1 CMF C24 H42 O4

Absolute stereochemistry. Double bond geometry as shown.

MeO
$$(CH_2)$$
 g Z R (CH_2) g R

2 CM

26544-09-2 CMF C12 H22 O2

CCI IDS

```
(tert-C_9H_{19})-C-O-CH=CH_2
     CM
          3
     CRN 141-32-2
     CMF C7 H12 O2
      0
n-BuO-C-CH=CH2
     CM
     CRN 108-05-4
     CMF C4 H6 O2
ACO-CH-CH2
     ICM C08K005-098
IC
         C08K005-10; C08L091-00; C09D011-10; C07C059-00
INCL 524398000; 524399000; 524400000; 524310000; 524313000; 523160000;
     554219000
     42-7 (Coatings, Inks, and Related Products)
     Section cross-reference(s): 38
IT
     Adhesives
        (pressure-sensitive; internally plasticized
        and low-VOC latex compns. for adhesives)
IT
     79-41-4DP, Methacrylic acid, polymers with Bu
     acrylate, Me methacrylate and Me ricinoleate acrylate
     108-05-4DP, Vinyl acetate, polymers with Bu acrylate,
     (meth)acrylated castor oil, and Me ricinoleate acrylate
     141-32-2DP, Butyl acrylate, polymers with vinyl acetate and castor
     oil methacrylates 814-68-6DP, Acryloyl chloride, reaction
     products with castor oil, polymers with (meth)acrylates
     920-46-7DP, Methacryloyl chloride, reaction products with castor
     oil, polymers with (meth)acrylates 115047-92-2DP, Sipomer BEM,
     polymers with lesquerella oil acrylate, vinyl acetate, and
     acrylates 224791-01-9P 603956-25-8P
     603956-26-9P 603956-27-0P
     RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical
     or engineered material use); PREP (Preparation); USES (Uses)
        (internally plasticized and low-VOC latex compns. for coatings,
        inks, and adhesives)
REFERENCE COUNT:
                               THERE ARE 9 CITED REFERENCES AVAILABLE
                               FOR THIS RECORD. ALL CITATIONS AVAILABLE
                               IN THE RE FORMAT
```

ACCESSION NUMBER: 2003:590862 HCAPLUS <<LOGINID::20060124>> DOCUMENT NUMBER: 139:151145
TITLE: Acrylic polymer emulsion coatings for films, paper and rubber articles

L227 ANSWER 14 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

Sastri 10/774,617 01/25/2006

INVENTOR(S):

Lee, Ivan S.

PATENT ASSIGNEE(S):

Avery Dennison Corp., USA

SOURCE:

U.S. Pat. Appl. Publ., 14 pp., Cont.-in-part

of U.S. 6,465,591.

CODEN: USXXCO

DOCUMENT TYPE: LANGUAGE: Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
 US 2003144446	A 1	20030731	US 2002-270749	
				2002 1015
US 6828399	B2	20041207		
US 6465591	B1	20021015	US 2000-556236	
				2000
				0424
PRIORITY APPLN. INFO.:			US 2000-556236	A2
				2000
				0424

- AB The acrylic polymer is formed in the presence of surfactants, preferably by sequential polymerization of two sep. monomer mixts. which include an alkyl (meth)acrylate, a quaternary amine (meth)acrylate, a hydroxyalkyl (meth)acrylate, an N-vinyl lactam, an ethylenically unsatd. carboxylic acid, and a fluorinated (meth)acrylate. To form a coating, the polymer is blended with an elastomer such as nitrile rubber latex. The coating is useful both for substrates used with ink-jet printers and for rubber articles.
- IT 566197-90-8P, Acrylic acid-Ageflex FA
 1Q80MC-Butyl acrylate-2-hydroxyethyl methacrylateMethacrylic acid-Methyl acrylate

Method with an art multi-

-Methyl methacrylate-Trifluoroethyl

methacrylate-N-vinylpyrrolidone copolymer ammonium salt

566197-92-0P, Acrylic acid-Ageflex FA

1Q80MC-Butyl acrylate-2-hydroxyethyl methacrylate-polyethylene glycol monomethacrylate methacrylate-Methacrylic

acid-Methyl acrylate-Methyl methacrylate

-Trifluoroethyl methacrylate

- -N-vinylpyrrolidone copolymer ammonium salt 566197-94-2P
- , Acrylic acid-Ageflex FA 1Q80MC-Butyl

acrylate-2-hydroxyethyl acrylate-polyethylene glycol

monomethacrylate-2-hydroxyethyl methacrylate-Methacrylic

acid-Methyl acrylate-Methyl methacrylate

-Trifluoroethyl methacrylate

-N-vinylpyrrolidone copolymer ammonium salt

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(acrylic polymer emulsion coatings for films, paper and rubber articles)

RN 566197-90-8 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate, 1-ethenyl-2-pyrrolidinone, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoic acid, 2-propenoic acid and trifluoroethyl 2-methyl-2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

CRN 566197-89-5

(C8 H16 N O2 . C7 H12 O2 . C6 H10 O3 . C6 H9 N O . C6 H7 F3

O2 . C5 H8 O2 . C4 H6 O2 . C4 H6 O2 . C3 H4 O2 . C1) \boldsymbol{x}

CCI PMS

CM 2

CRN 44992-01-0

CMF C8 H16 N O2 . C1

$$\begin{array}{c} \text{O} \\ || \\ \text{Me}_3 + \text{N} - \text{CH}_2 - \text{CH}_2 - \text{O} - \text{C} - \text{CH} \longrightarrow \text{CH}_2 \end{array}$$

• c1 -

CM

CRN 38785-10-3

CMF C6 H7 F3 O2 CCI IDS

3 (D1-F)

CM 4

CRN 868-77-9 CMF C6 H10 O3

$$^{\mathrm{H_2C}}_{\parallel}$$
 $^{\mathrm{C}}_{\parallel}$ $^{\mathrm{Me}}_{\parallel}$ $^{\mathrm{C}}_{\mathrm{C}}$ $^{\mathrm{C}}_{$

CM 5

CRN 141-32-2

CMF C7 H12 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{n-BuO-C-CH-----} \text{CH-----} \text{CH}_2 \end{array}$$

CRN 96-33-3 CMF C4 H6 O2

CM 7

CRN 88-12-0 CMF C6 H9 N O

CM 8

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c} ^{\text{H}_2\text{C}} \circ \\ \parallel \ \parallel \\ \text{Me-C-C-OMe} \end{array}$$

CM 9

CRN 79-41-4 CMF C4 H6 O2

$$\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me-C-CO}_2 \text{H} \end{array}$$

CM 10

CRN 79-10-7 CMF C3 H4 O2

RN 566197-92-0 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate, 1-ethenyl-2-pyrrolidinone, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, α-(2-methyl-1-oxo-2-propenyl)-ω-hydroxypoly(oxy-1,2-ethanediyl), methyl 2-propenoate, 2-methyl-2-propenoic acid, 2-propenoic acid and trifluoroethyl 2-methyl-2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 566197-91-9
CMF (C8 H16 N O2 . C7 H12 O2 . C6 H10 O3 . C6 H9 N O . C6 H7 F3 O2 . C5 H8 O2 . C4 H6 O2 . C4 H6 O2 . C3 H4 O2 . (C2 H4 O)n C4 H6 O2 . C1)x

CCI PMS

CM 2

CRN 44992-01-0 CMF C8 H16 N O2 . Cl

$$\begin{array}{c} & \text{O} \\ || \\ \text{Me}_3 + \text{N} - \text{CH}_2 - \text{CH}_2 - \text{O} - \text{C} - \text{CH} = \text{CH}_2 \end{array}$$

• c1-

CM 3

CRN 38785-10-3 CMF C6 H7 F3 O2 CCI IDS

3 (D1-F)

CM 4

CRN 25736-86-1 CMF (C2 H4 O)n C4 H6 O2 CCI PMS

$$\begin{array}{c|c} H_2C & O \\ \parallel & \parallel \\ Me-C-C & ---- O-CH_2-CH_2 & ---- OH_2-CH_2 & ----- OH_2-CH_2 & ---- OH_2-CH_2 & ---- OH_2-CH_2 & ---- OH_2-CH_2 &$$

CRN 868-77-9 CMF C6 H10 O3

$$^{\rm H_2C}_{||}$$
 о $^{\rm H_2C}_{||}$ Ме- C- C- O- CH $_2$ - CH $_2$ - ОН

CM 6

CRN 141-32-2 CMF C7 H12 O2

$$\begin{matrix} \text{O} \\ \parallel \\ \text{n-BuO-C-CH} \end{matrix} = \text{CH}_2$$

CM 7

CRN 96-33-3 CMF C4 H6 O2

CM 8

CRN 88-12-0 CMF C6 H9 N O

CM 9

CRN 80-62-6

CMF C5 H8 O2

CM 10

CRN 79-41-4 CMF C4 H6 O2

$$\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me-} \text{C-} \text{CO}_2 \text{H} \end{array}$$

CM 11

CRN 79-10-7 CMF C3 H4 O2

CM 1

CRN 566197-93-1
CMF (C8 H16 N O2 . C7 H12 O2 . C6 H10 O3 . C6 H9 N O . C6 H7 F3 O2 . C5 H8 O3 . C5 H8 O2 . C4 H6 O2 . C4 H6 O2 . C3 H4 O2 . (C2 H4 O)n C4 H6 O2 . C1)x
CCI PMS

CM 2

CRN 44992-01-0 CMF C8 H16 N O2 . Cl

● c1 -

CM 3

CRN 38785-10-3 CMF C6 H7 F3 O2 CCI IDS

3 (D1-F)

CM 4

CRN 25736-86-1 CMF (C2 H4 O)n C4 H6 O2 CCI PMS

$$\begin{array}{c|c} {\rm H_2C} & {\rm O} \\ \parallel & \parallel \\ {\rm Me-C-C} & {\rm CH_2-CH_2- \frac{1}{n}} \end{array}$$
 OH

CM 5

CRN 868-77-9 CMF C6 H10 O3

CM 6

CRN 818-61-1 CMF C5 H8 O3

CRN 141-32-2 CMF C7 H12 O2

CM 8

CRN 96-33-3 CMF C4 H6 O2

CM 9

CRN 88-12-0 CMF C6 H9 N O

CM 10

CRN 80-62-6 CMF C5 H8 O2

CM 11

CRN 79-41-4 CMF C4 H6 O2

```
CH<sub>2</sub>
Me-C-CO2H
          CM
               12
          CRN
              79-10-7
          CMF C3 H4 O2
HO-C-CH=CH2
   ICM B32B009-00
IC
INCL 526317100; 428431000; 002161700; 002168000; 428483000; 428492000
     42-7 (Coatings, Inks, and Related Products)
     Section cross-reference(s): 38, 39, 43, 74
IT
     Synthetic rubber, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (acrylonitrile-butadiene-methacrylic acid,
        Synthomer 6000; acrylic polymer emulsion coatings for films,
        paper and rubber articles)
IT
    Adhesives
        (pressure-sensitive; acrylic polymer
        emulsion coatings for adhesive release liners)
IT
    566197-90-8P, Acrylic acid-Ageflex FA
     1Q80MC-Butyl acrylate-2-hydroxyethyl methacrylate-
    Methacrylic acid-Methyl acrylate
     -Methyl methacrylate-Trifluoroethyl
    methacrylate-N-vinylpyrrolidone copolymer ammonium salt
     566197-92-0P, Acrylic acid-Ageflex FA
     1Q80MC-Butyl acrylate-2-hydroxyethyl methacrylate-polyethylene
     glycol monomethacrylate methacrylate-Methacrylic
    acid-Methyl acrylate-Methyl methacrylate
     -Trifluoroethyl methacrylate
     -N-vinylpyrrolidone copolymer ammonium salt 566197-94-2P
     , Acrylic acid-Ageflex FA 1Q80MC-Butyl
     acrylate-2-hydroxyethyl acrylate-polyethylene glycol
    monomethacrylate-2-hydroxyethyl methacrylate-Methacrylic
     acid-Methyl acrylate-Methyl methacrylate
     -Trifluoroethyl methacrylate
     -N-vinylpyrrolidone copolymer ammonium salt
    RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical
    or engineered material use); PREP (Preparation); USES (Uses)
        (acrylic polymer emulsion coatings for films, paper and rubber
        articles)
TT
    569668-97-9, SRI 13796-51
    RL: MOA (Modifier or additive use); USES (Uses)
        (crosslinkers; acrylic polymer emulsion coatings for
        films, paper and rubber articles)
IT
    32535-84-5, Ammonium zirconyl carbonate
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (crosslinkers; acrylic polymer emulsion coatings for
        films, paper and rubber articles)
                               THERE ARE 62 CITED REFERENCES AVAILABLE
REFERENCE COUNT:
                         62
                               FOR THIS RECORD. ALL CITATIONS AVAILABLE
```

IN THE RE FORMAT

L227 ANSWER 15 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:509970 HCAPLUS <<LOGINID::20060124>>

DOCUMENT NUMBER: 139:70232

TITLE: Removable pressure-sensitive

acrylic adhesive for adhesive sheets

with excellent weatherability and pot life Yamanaka, Takeshi; Itou, Shinetsu; Shibata,

Kenichi; Suto, Takeshi; Miyoshi, Isamu

PATENT ASSIGNEE(S): Nitto Denko Corporation, Japan

SOURCE:

Eur. Pat. Appl., 10 pp.

INVENTOR(S):

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

P.	PATENT NO.					KIND DATE			APPLICATION NO.					DATE	
			-									0014	_		
E	٠	1323	802			A2		2003	0702	EP	2002-	.2814	2		2002
															2002 1218
ום		1222	802			λ 2		2003	1202						1216
EI	?	1323	802			В1		2005	0302						
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB, GI	R, IT,	LI,	LU,	NL,	SE,
			MC.	PT.	IE.	SI.	LT.	LV.	FI.	RO, MI	C. CY.	AL.	TR.	BG.	CZ,
			EE.				•				.,		•		
IT.	>	2003	1836:			A2		2003	0703	JР	2001-	3861	64		
O.F	•	2005	1050.	12		A2		2005	0,05	O.F	2001	3001	04		2001
															1219
US	3	2003	12434	46		A1		2003	0703	US	2002-	3149	49		
															2002
															1210
110	,	6869	<i>c</i> 70			В2		2005	^222						1210
	-					D4		2005	0322						_
PRIORIT	ľ. X	APP.	LN.	INFO	. :					JP	2001-	3861	64	- 1	A
															2001
															1219

AB A pressure-sensitive adhesive

comprises (I) 100 parts by weight on a solid basis of an aqueous dispersion type acrylic copolymer obtained by polymerizing a monomer mixture in an aqueous medium in the presence of a nonionic surfactant and/or an anionic surfactant each having an ethylenic double bond, and (II) 0.1 to 3 parts by weight of a hindered-amine light stabilizer having a piperidine ring in which the nitrogen atom has a tertiary amine structure. The adhesive can be applied to metal sheets or to metallic members which have undergone a coating treatment and can be easily removed therefrom. Thus, an adhesive was prepared by mixing Tinuvin 765, Tinuvin 213, WS 500, and a polymer derived from Bu acrylate, Bu methacrylate, acrylic acid,

4-nonyl-2-propenylphenylpolyoxyethylene, and 4-Nonyl-2propenylphenylpolyoxyethylene ammonium sulfate.

IT 30174-70-0, WS 500

RL: MOA (Modifier or additive use); USES (Uses) (crosslinking agent; production of removable pressure-sensitive acrylic adhesive

for adhesive sheets)

RN 30174-70-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate and 4,5-dihydro-2-(1-methylethenyl)oxazole (9CI) INDEX NAME)

CM 1

CRN 10471-78-0 CMF C6 H9 N O

CM 2

CRN 141-32-2 CMF C7 H12 O2

$$\begin{matrix} \text{O} \\ \parallel \\ \text{n-BuO-C-CH------} \text{CH}_2 \end{matrix}$$

CM 3

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c|c} ^{H_2C} & \text{O} \\ \parallel & \parallel \\ \text{Me-} & \text{C--} \text{C--} \text{OMe} \end{array}$$

IT 350821-38-4P, Acrylic acid-butyl acrylate-butyl methacrylate-oxirane graft copolymer ammonium sulfate 552283-14-4P, Acrylic acid -butyl acrylate-butyl methacrylate-2-polyethylene

-butyl acrylate-butyl methacrylate-2-polyethylene glycol-4-nonyl-2-propenylphenylpolyoxyethylene-4-nonyl-2propenylphenylpolyoxyethyleneammonium sulfate graft copolymer RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(production of removable pressure-sensitive
acrylic adhesive for adhesive sheets)

RN 350821-38-4 HCAPLUS

2-Propenoic acid, 2-methyl-, butyl ester, polymer with butyl 2-propenoate, oxirane and 2-propenoic acid, hydrogen sulfate, graft, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CN

CRN 7664-93-9 CMF H2 O4 S

CRN 350821-37-3

CMF (C8 H14 O2 . C7 H12 O2 . C3 H4 O2 . C2 H4 O) x

CCI PMS

CM 3

CRN 141-32-2 CMF C7 H12 O2

$$\overset{\text{O}}{\parallel}_{\text{n-BuO-C-CH----}}\text{CH----}$$

CM 4

CRN 97-88-1 CMF C8 H14 O2

$$\begin{array}{c} \text{O} \quad \text{CH}_2 \\ \parallel \quad \parallel \\ \text{n-BuO-C-C-Me} \end{array}$$

CM 5

CRN 79-10-7 CMF C3 H4 O2

CM 6

CRN 75-21-8 CMF C2 H4 O



RN 552283-14-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with butyl 2-propenoate, α -[4-nonyl-2-(1-propenyl)phenyl]- ω -hydroxypoly(oxy-1,2-ethanediyl), 2-propenoic acid and α -sulfo- ω -[4-nonyl-2-(1-propenyl)phenoxy]poly(oxy-1,2-ethanediyl) ammonium salt, graft (9CI) (CA INDEX NAME)

CM 1

CRN 146847-27-0

CMF (C2 H4 O)n C18 H28 O

CCI PMS

Me- (CH₂)₈

$$O- CH2- CH2 \longrightarrow D$$

$$CH = CH- Me$$

CM 2

CRN 140651-97-4

CMF (C2 H4 O)n C18 H28 O4 S . H3 N

CCI PMS

HO₃S
$$O-CH_2-CH_2$$
 0 $Ne-CH=CH$

NH3

CM 3

CRN 141-32-2 CMF C7 H12 O2

CM 4

CRN 97-88-1 CMF C8 H14 O2

```
O CH2
n-BuO- C- C- Me
     CM
          5
     CRN
         79-10-7
     CMF C3 H4 O2
   0
HO- C- CH CH2
IC
     ICM C09J133-08
     ICS C09J007-02
     38-3 (Plastics Fabrication and Uses)
CC
     pressure sensitive acrylic adhesive
     sheet hindered amine light stabilizer
IT
     Amines, uses
     RL: MOA (Modifier or additive use); USES (Uses)
        (hindered, light stabilizer; production of removable
        pressure-sensitive acrylic adhesive
        for adhesive sheets)
IT
     Adhesives
        (pressure-sensitive; production of removable
        pressure-sensitive acrylic adhesive
        for adhesive sheets)
IT
     Crosslinking agents
     Light stabilizers
     UV stabilizers
        (production of removable pressure-sensitive
        acrylic adhesive for adhesive sheets)
IT
     Acrylic polymers, uses
     RL: IMF (Industrial manufacture); POF (Polymer in formulation);
     PRP (Properties); TEM (Technical or engineered material use); PREP
     (Preparation); USES (Uses)
        (production of removable pressure-sensitive
        acrylic adhesive for adhesive sheets)
IT
     Adhesives
        (sheets; production of removable pressure-
        sensitive acrylic adhesive for adhesive
        sheets)
IT
     3864-99-1, Tinuvin 327
                             136457-10-8, Tinuvin 213
     RL: MOA (Modifier or additive use); USES (Uses)
        (UV absorbers; production of removable pressure-
        sensitive acrylic adhesive for adhesive
        sheets)
TT
     30174-70-0, WS 500
     RL: MOA (Modifier or additive use); USES (Uses)
        (crosslinking agent; production of removable
        pressure-sensitive acrylic adhesive
        for adhesive sheets)
IT
     41556-26-7, Tinuvin 765
                               106990-43-6, Chimassorb 119FL
     RL: MOA (Modifier or additive use); USES (Uses)
        (hindered-amine light stabilizer; production of removable
        pressure-sensitive acrylic adhesive
        for adhesive sheets)
```

```
IT
     7727-54-0, Ammonium persulfate
     RL: CAT (Catalyst use); USES (Uses)
        (polymerization catalysts; production of removable pressure-
        sensitive acrylic adhesive for adhesive
IT
     350821-38-4P, Acrylic acid-butyl
     acrylate-butyl methacrylate-oxirane graft copolymer ammonium
     sulfate 552283-14-4P, Acrylic acid -butyl acrylate-butyl methacrylate-2-polyethylene
     glycol-4-nonyl-2-propenylphenylpolyoxyethylene-4-nonyl-2-
     propenylphenylpolyoxyethyleneammonium sulfate graft copolymer
     RL: IMF (Industrial manufacture); POF (Polymer in formulation);
     PRP (Properties); TEM (Technical or engineered material use); PREP
     (Preparation); USES (Uses)
        (production of removable pressure-sensitive
        acrylic adhesive for adhesive sheets)
L227 ANSWER 16 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         2003:376194 HCAPLUS <<LOGINID::20060124>>
DOCUMENT NUMBER:
                         138:369678
TITLE:
                         High solids content, low-viscosity emulsion
                         polymers for adhesives and binders
INVENTOR(S):
                         Lee, Ivan
PATENT ASSIGNEE(S):
                         Avery Dennison Corp., USA
                         U.S. Pat. Appl. Publ., 8 pp.
SOURCE:
                         CODEN: USXXCO
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                         KIND
                                DATE
                                           APPLICATION NO.
                                                                     DATE
                                20030515
     US 2003091778
                          Α1
                                             US 2002-264453
                                                                     2002
                                                                     1004
     US 6706356
                         B2
                                20040316
                                             US 2001-327238P
PRIORITY APPLN. INFO.:
                                                                     2001
                                                                     1005
AB
     Emulsion polymers useful in the preparation of coatings and
     adhesives, including pressure-sensitive
     adhesive tapes, labels, and other constructions, are
```

- AB Emulsion polymers useful in the preparation of coatings and adhesives, including pressure-sensitive adhesive tapes, labels, and other constructions, are provided. The polymers are characterized by high solids content and low viscosity. A method of making the polymers is also provided. A plurality of acrylic monomers are copolymd. in the presence of a plurality of surfactants, using a split feed, and the resulting emulsion polymers have a bimodal or higher particle-size distribution.
- IT 510744-90-8P, Acrylic acid-2-ethylhexyl acrylate
 -methacrylic acid-methyl acrylate-Norsocryl
 104-N-vinyl-2-pyrrolidone copolymer
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (high solids content, low-viscosity emulsion polymers for adhesives and binders)
- RN 510744-90-8 HCAPLUS
- CN 2-Propenoic acid, 2-methyl-, polymer with 1-ethenyl-2-pyrrolidinone, 2-ethylhexyl 2-propenoate, methyl 2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate and

2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 86261-90-7 CMF C9 H14 N2 O3

$$\begin{array}{c|c} H & O & \\ \hline & N & O & CH_2 \\ \hline & & \parallel & \parallel \\ CH_2-CH_2-O-C-C-Me \end{array}$$

CM 2

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \text{O} \\ || \\ \text{CH}_2-\text{O-C-CH} \longrightarrow \text{CH}_2 \\ | \\ \text{Et-CH-Bu-n} \end{array}$$

CM 3

CRN 96-33-3 CMF C4 H6 O2

CM 4

CRN 88-12-0 CMF C6 H9 N O

CM 5

CRN 79-41-4 CMF C4 H6 O2 Sastri 10/774,617

```
CH<sub>2</sub>
- С— CO2H
```

CM

CRN 79-10-7 CMF C3 H4 O2

HO-C-CH = CH2

TC ICM B32B029-02

ICS C08L033-00; B32B009-00

INCL 428040100; 428292700; 524556000

37-3 (Plastics Manufacture and Processing)

Section cross-reference(s): 38, 42

510744-90-8P, Acrylic acid-2-ethylhexyl acrylate IT

-methacrylic acid-methyl acrylate-Norsocryl

104-N-vinyl-2-pyrrolidone copolymer

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical

or engineered material use); PREP (Preparation); USES (Uses) (high solids content, low-viscosity emulsion polymers for adhesives and binders)

L227 ANSWER 17 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2003:349330 HCAPLUS <<LOGINID::20060124>>

DOCUMENT NUMBER:

138:339415

TITLE:

SOURCE:

Solvent-free resin compositions and their

cured products for optical waveguides

INVENTOR(S):

Yokoshima, Minoru

PATENT ASSIGNEE(S):

Nippon Kayaku Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
 JP 2003128731	A2	20030508	JP 2001-330618	
TD 2022422	20	00060105		2001 1029
JP 3732433 PRIORITY APPLN. INFO.:	B2	20060105	JP 2001-330618	2001
				2001 1029

MARPAT 138:339415 OTHER SOURCE(S):

The compns. comprise (A) urethane methacrylates as reaction products of R[C(CF3)2OH]2 [R = C6H10, C6H4-p-OC6H4-p, 5-C1-13 (fluoro)alkyl-(un)substituted 1,3-phenylene] with 2-isocyanatoethyl methacrylate (I) and (B) ethylenically unsatd. compds. Thus, a dimethacrylate compound (II) prepared from

1,4-bis(hexafluoro-2-hydroxy-2-propyl)cyclohexane and I was mixed with 1,6-hexanediol diacrylate and a photopolymn. initiator to give a composition, which was applied on a substrate and UV-cured to give a layer. Then, a composition containing II, phenoxyethyl acrylate, and the initiator was applied on the above layer, masked, UV-cured, and developed to give an optical waveguide pattern, and the former curable composition was applied on the pattern and the lower cladding layer and UV-cured to give a multimode-channel optical waveguide.

IT 517855-07-1P 517855-08-2P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(solvent-free urethane methacrylate-ethylenically unsatd.

compound compns. and their cured products for optical waveguides)

RN 517855-07-1 HCAPLUS

2-Propenoic acid, 2-methyl-, 1,4-cyclohexanediylbis[[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]oxycarbonylimino-2,1-ethanediyl] ester, polymer with 1,6-hexanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CN

CRN 517855-06-0 CMF C26 H30 F12 N2 O8

CM 2

CRN 13048-33-4 CMF C12 H18 O4

RN 517855-08-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,4-cyclohexanediylbis[[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]oxycarbonylimino-2,1-ethanediyl] ester, polymer with 2-phenoxyethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 517855-06-0 CMF C26 H30 F12 N2 O8

CRN 48145-04-6 CMF C11 H12 O3

IC ICM C08F220-36

ICS G02B006-12

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 37, 73

urethane methacrylate polymer optical waveguide; ST bishexafluorohydroxypropylcyclohexane isocyanatoethyl methacrylate urethane dimethacrylate; hexanediol diacrylate urethane dimethacrylate

polymer optical waveguide; phenoxyethyl acrylate urethane

dimethacrylate polymer optical waveguide

IT 517855-07-1P 517855-08-2P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(solvent-free urethane methacrylate-ethylenically unsatd.

compound compns. and their cured products for optical waveguides)

L227 ANSWER 18 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: DOCUMENT NUMBER: 138:221973

TITLE: N-Alkylimidazolidinone (meth)

acrylates, their production and their

sue

INVENTOR(S): Paul, Jean Michel; Dupont, Bernard

PATENT ASSIGNEE(S): ATOFINA, Fr.

Fr. Demande, 21 pp. SOURCE:

CODEN: FRXXBL

DOCUMENT TYPE: Patent

French LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2829134	A1	20030307	FR 2001-11178	2001
EP 1293502	A1	20030319	EP 2002-292058	0828 2002

R: AT, BE, CH, MC, PT, IE, EE, SK			R, IT, LI, LU, K, CY, AL, TR,	
US 2003096931	A1 2003	0522 US	2002-225731	
				2002 0822
US 6706887		0316		
JP 2003113165	A2 2003	0418 JP	2002-246272	2222
				2002 0827
TW 575568	B 2004	0211 TW	2002-91119369	
				2002 0827
CN 1432570	A 2003	0730 CN	2002-142133	
				2002
US 2004147761	A1 2004	0729 US	2003-738940	0828
05 2004147701	A1 2004	0723 03	2003 730940	2003 1215
PRIORITY APPLN. INFO.:		FR	2001-11178	A
				2001 0828
		US	2002-225731	A3
				2002 0822

MARPAT 138:221973 OTHER SOURCE(S):

N-Alkylimidazolidinone (meth)acrylates are obtained by the condensation of an alkyl (meth)acrylate with an N-(hydroxyalkyl)-2-imidazolidinone in the presence of a catalyst, which is a lithium chelate of a 1,3-dicarbonyl compound, in solution The prepared monomers, which are obtained with less discoloration than with prior-art methods, are suitable for producing polymers usable in various applications. In an example, 1-(2-hydroxyethyl)-2-imidazolidinone was refluxed with Me methacrylate in 4-methoxyphenol containing Li acetylacetonate to give 1-[2-(methacryloyloxy)ethyl]-2-imidazolidinone in 33.3% yield with APHA color 41, compared to 35.7 and 100, resp., when using Ca bis(acetylacetonate).

IC ICM C07D233-32

C07D239-10; C07D243-04; C07D247-02; C08F020-34; C09D133-14; ICS C09J133-14

CC 35-2 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 28

ST ethylimidazolidinone methacrylate prodn

lithium acetylacetonate catalyst discoloration prevention

IT Esterification catalysts

Polymerization inhibitors

(in production of alkylimidazolidinone (meth)

acrylates with decreased discoloration)

IT 18115-70-3, Lithium acetylacetonate, uses 18223-35-3 22643-60-3 22441-09-4 22441-13-0 52122-13-1 52122-15-3 70902-15-7 127892-64-2 182188-18-7

RL: CAT (Catalyst use); USES (Uses)

(catalyst; in production of alkylimidazolidinone (meth)

acrylates with decreased discoloration)

1305-62-0, Calcium hydroxide, uses 1305-78-8, Calcium oxide, IT uses 2414-98-4, Magnesium diethoxide 19372-44-2, Calcium bis(acetylacetonate), uses RL: CAT (Catalyst use); USES (Uses)

Sastri 10/774,617

```
(cocatalyst; in production of alkylimidazolidinone (meth)
        acrylates with decreased discoloration)
     92-84-2, Phenothiazine 106-50-3, p-Phenylenediamine, uses
IT
     123-31-9, Hydroquinone, uses 128-37-0, Di-tert-butyl-p-cresol,
     uses 150-76-5, 4-Methoxyphenol 2564-83-2, TEMPO 25377-22-4,
     Di-tert-butylcatechol
     RL: CAT (Catalyst use); USES (Uses)
        (polymerization inhibitor; in production of alkylimidazolidinone
        (meth)acrylates with decreased discoloration)
     86261-90-7P, 1-[2-(Methacryloyloxy)ethyl]-2-
IT
     imidazolidinone
     RL: IMF (Industrial manufacture); PREP (Preparation)
        (production of alkylimidazolidinone (meth)
        acrylates with decreased discoloration)
     80-62-6, Methyl methacrylate 3699-54-5,
ΙT
     1-(2-Hydroxyethyl)-2-imidazolidinone
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (starting material; in production of alkylimidazolidinone
        (meth) acrylates with decreased discoloration)
L227 ANSWER 19 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         2002:921791 HCAPLUS <<LOGINID::20060124>>
DOCUMENT NUMBER:
                         137:389256
                         Injection molding of polymerizable materials
TITLE:
                         for prosthetic teeth
                         Lichkus, Andrew M.; Bollinger, Wayne C.;
INVENTOR(S):
                         Shaffer, Scott E.
                         Dentsply Research & Development Corp., USA
PATENT ASSIGNEE(S):
                         U.S., 29 pp.
CODEN: USXXAM
SOURCE:
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                            APPLICATION NO.
                                                                   DATE
     PATENT NO.
                        KIND
                                DATE
     _____
                        ----
                                -----
     _____
    US 6488503
                         B1
                                20021203
                                            US 2000-734867
                                                                   2000
                                                                   1212
     CA 2468265
                         AA
                                20040506
                                            CA 2002-2468265
                                                                   2002
                                                                   1023
    WO 2004037112
                         A1
                                20040506
                                           WO 2002-US33819
                                                                   2002
                                                                   1023
        W: CA, JP
        RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR,
            IE, IT, LU, MC, NL, PT, SE, SK, TR
     EP 1437981
                                20040721
                                           EP 2002-780514
                          A1
                                                                   2002
                                                                   1023
           AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
            MC, PT, IE, FI, CY, TR, BG, CZ, EE, SK
PRIORITY APPLN. INFO.:
                                            US 1999-171336P
                                                                   1999
                                                                   1221
                                            WO 2002-US33819
```

2002 1023

```
A process for producing an artificial tooth comprises injection
     molding of a polymerizable material into a mold to form an outer
     external polymeric layer. Then injection molding of the
     polymerizable material into the mold leads to the formation of an
     inner polymeric layer applied on the first external layer, and a
     solid core applied on the inner external layer. A 2-step
     "preswell" mixing method was used to prepare a precursor blend from
     which prosthetic teeth were molded. The blend having the
     following composition in step 1: Me methacrylate 42.40, benzoyl
     peroxide 0.25, urethane diacrylate 6.00,
     2,2-bis(4-methacryloxyphenyl)propane 1.50, poly(Me
     methacrylate-co-ethylene dimethacrylate) (90:10) 49.85%.
     ICM A61C013-08
INCL 433202100; 264019000
     63-7 (Pharmaceuticals)
     80-62-6, Methyl methacrylate 97-90-5, Ethylene glycol
IT
     dimethacrylate 407-47-6, 2,2,2-Trifluoroethyl
     acrylate 3253-39-2, 2,2-Bis(4-methacryloxyphenyl)propane 9011-14-7, Poly(methyl methacrylate) 25777-71-3, Ethylene
                                            25777-71-3, Ethylene glycol
     dimethacrylate-methyl methacrylate copolymer
     RL: PEP (Physical, engineering or chemical process); PYP (Physical
     process); THU (Therapeutic use); BIOL (Biological study); PROC
     (Process); USES (Uses)
        (injection molding of polymerizable materials for prosthetic
        teeth)
REFERENCE COUNT:
                                THERE ARE 42 CITED REFERENCES AVAILABLE
                                FOR THIS RECORD. ALL CITATIONS AVAILABLE
                                IN THE RE FORMAT
L227 ANSWER 20 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         DOCUMENT NUMBER:
                         136:168589
TITLE:
                         Water- and humidity-resistant pressure
                         sensitive adhesive
                         compositions having good adhesion to
                         difficult-to-bond substrates and balanced peel
                         and shear properties
INVENTOR(S):
                         Kleiner, Joseph G.; Foreman, Paul B.; Reedell,
                         Scott A.; Ouyang, Jiangbo; Smith, Dawn E.
PATENT ASSIGNEE(S):
                         National Starch and Chemical Investment
                         Holding Corporation, USA
SOURCE:
                         PCT Int. Appl., 28 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                         KIND
                                DATE
                                             APPLICATION NO.
                                                                    DATE
     _____
     WO 2002010306 A2
                                20020207 WO 2001-US23492
                                                                     2001
                                                                     0726
                                20020829
     WO 2002010306
                          A3
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI,
```

GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW,

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AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE,
             CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
             MR, NE, SN, TD, TG
                                             US 2000-627488
PRIORITY APPLN. INFO.:
                                                                     2000
                                                                     0728
     The title compns. comprise: (A) 30-95% an emulsion polymers containing
AB
     14-99% alkyl acrylate monomers, (B) 1-50% an aqueous anionic or
     nonionic dispersion of polyurethane, (C) up to 45% an aqueous
     dispersion of a tackifying agent and (D) up to 2% a
     crosslinking agent, wherein the amount of A-D is based on
     dry weight One example of A was obtained by multi-stage emulsion
     polymerization from a preemulsion of Bu acrylate 486, Me acrylate 54,
     methacrylic acid 12 and 2-hydroxyethyl acrylate
     12 g, with 54 g Bu acrylate and 6 g Me acrylate in the presence of
     Aerosol MA 80I (a sodium dialkylsulfosuccinate), Witcolate D 51-53
     (possibly sodium alkylphenoxypoly(ethyleneoxyethyl) sulfate],
     Aerosol 22, a tetrasodium 4-[N-(1,2-dicarboxyethyl)-N-
     octadecylamino]-4-oxo-2-sulfobutanoate, Aerosol OT 75PG (a sodium
     dialkylsulfosuccinate), as surfactants.
     25230-94-8P, Butyl acrylate-2-hydroxyethyl acrylate-
IT
     methacrylic acid-methyl methacrylate copolymer
     395643-11-5P, Butyl acrylate-2-hydroxyethyl acrylate-
     methacrylic acid-methyl acrylate-sodium
     vinylsulfonate-N-tert-octylacrylamide copolymer
     395643-12-6P, Butyl acrylate-2-hydroxyethyl acrylate-
     methacrylic acid-methyl methacrylate-sodium
     vinylsulfonate-N-tert-octylacrylamide copolymer
     RL: IMF (Industrial manufacture); PEP (Physical, engineering or
     chemical process); POF (Polymer in formulation); PRP (Properties);
     PYP (Physical process); TEM (Technical or engineered material
     use); PREP (Preparation); PROC (Process); USES (Uses)
        (prepns. of emulsion polymers for water- and humidity-resistant
        pressure sensitive adhesive
        compns.)
RN
     25230-94-8 HCAPLUS
     2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,
CN
     2-hydroxyethyl 2-propenoate and methyl 2-methyl-2-propenoate (9CI)
       (CA INDEX NAME)
     CM
          1
     CRN 818-61-1
     CMF C5 H8 O3
HO-CH2-CH2-O-C-CH-CH2
     CM
          2
     CRN 141-32-2
```

CMF C7 H12 O2

CRN 80-62-6 CMF C5 H8 O2

CM

CRN 79-41-4 CMF C4 H6 O2

$$\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me-} \text{C-} \text{CO}_2 \text{H} \end{array}$$

395643-11-5 HCAPLUS RN

2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 2-hydroxyethyl 2-propenoate, methyl 2-propenoate, sodium ethenesulfonate and N-(1,1,3,3-tetramethylbutyl)-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 4223-03-4 CMF C11 H21 N O

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{NH-C-CH----} \text{CH}_2 \\ \parallel \\ \text{Me-C-CH}_2 - \text{CMe}_3 \\ \parallel \\ \text{Me} \end{array}$$

CM 2

CRN 3039-83-6 CMF C2 H4 O3 S . Na $H_2C = CH - SO_3H$

Na

CM 3

CRN 818-61-1 CMF C5 H8 O3

$$\begin{array}{c} {\rm O} \\ || \\ {\rm HO-CH_2-CH_2-O-C-CH} \end{array}$$

CM 4

CRN 141-32-2 CMF C7 H12 O2

CM 5

CRN 96-33-3 CMF C4 H6 O2

CM 6

CRN 79-41-4 CMF C4 H6 O2

$$\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me- C- CO}_2 \text{H} \end{array}$$

RN 395643-12-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,
2-hydroxyethyl 2-propenoate, methyl 2-methyl-2-propenoate, sodium
ethenesulfonate and N-(1,1,3,3-tetramethylbutyl)-2-propenamide
(9CI) (CA INDEX NAME)

CRN 4223-03-4 CMF C11 H21 N O

$$\begin{array}{c} \text{O} \\ || \\ \text{NH-C-CH} \end{array}$$

$$\text{CH}_2$$

$$\text{Me-C-CH}_2\text{-CMe}_3$$

$$\text{Me}$$

$$\text{Me}$$

CM 2

CRN 3039-83-6 CMF C2 H4 O3 S . Na

 $H_2C = CH - SO_3H$

Na

CM 3

CRN 818-61-1 CMF C5 H8 O3

CM 4

CRN 141-32-2 CMF C7 H12 O2

CM 5

CRN 80-62-6 CMF C5 H8 O2

```
H<sub>2</sub>C O
   - C- C- OMe
     CM
          6
     CRN 79-41-4
     CMF C4 H6 O2
   CH<sub>2</sub>
Me-C-CO2H
TC
     ICM C09J133-00
CC
     38-3 (Plastics Fabrication and Uses)
     Section cross-reference(s): 35
ST
     acrylate emulsion polymer water resistant pressure
     sensitive adhesive compn; polyurethane
     dispersion humidity resistant pressure sensitive
     adhesive compn; surfactant emulsion polymn
     adhesive prepn peel shear property
TΤ
     Urethane rubber, uses
     RL: PEP (Physical, engineering or chemical process); POF (Polymer
     in formulation); PRP (Properties); PYP (Physical process); TEM
     (Technical or engineered material use); PROC (Process); USES
        (Bayhydrol PR 240 and Luphen D 200A, dispersing agent; in
        water- and humidity-resistant pressure
        sensitive adhesive compns.)
IT
     Polyurethanes, uses
     RL: PEP (Physical, engineering or chemical process); POF (Polymer
     in formulation); PRP (Properties); PYP (Physical process); TEM
     (Technical or engineered material use); PROC (Process); USES
     (Uses)
        (dispersing agent; in water- and humidity-resistant
        pressure sensitive adhesive
        compns.)
IT
     Polymerization
        (emulsion, multistage; for prepns. of prepns. of emulsion
        polymers in water- and humidity-resistant pressure
        sensitive adhesive compns.)
IT
     Adhesives
        (emulsions, pressure-sensitive; water- and
        humidity-resistant pressure sensitive
        adhesive compns.)
IT
     Surfactants
        (for prepns. of prepns. of emulsion polymers in water- and
        humidity-resistant pressure sensitive
        adhesive compns.)
IT
    Dispersing agents
        (in water- and humidity-resistant pressure
        sensitive adhesive compns.)
ΙT
     Adhesives
        (peelable, pressure-sensitive; water- and
        humidity-resistant pressure sensitive
        adhesive compns.)
```

Polyoxyalkylenes, uses

IT

```
RL: NUU (Other use, unclassified); USES (Uses)
        (sulfo-terminated, surfactants; for prepns. of
        prepns. of emulsion polymers in water- and humidity-resistant
        pressure sensitive adhesive
        compns.)
    Adhesives
TΤ
        (water-resistant; water- and humidity-resistant
        pressure sensitive adhesive
     101964-24-3, Witcobond W 290H 174515-03-8, QW 18-1
     199343-64-1, Bayhydrol DLN 396091-83-1, QW 28 396091-93-3, QW
     16-1 396092-15-2, Luphen D-DS 3459
     RL: PEP (Physical, engineering or chemical process); POF (Polymer
     in formulation); PRP (Properties); PYP (Physical process); TEM
     (Technical or engineered material use); PROC (Process); USES
        (dispersing agent; in water- and humidity-resistant
        pressure sensitive adhesive
        compns.)
    25230-94-8P, Butyl acrylate-2-hydroxyethyl acrylate-
TT
    methacrylic acid-methyl methacrylate copolymer
     395643-11-5P, Butyl acrylate-2-hydroxyethyl acrylate-
    methacrylic acid-methyl acrylate-sodium
     vinylsulfonate-N-tert-octylacrylamide copolymer
     395643-12-6P, Butyl acrylate-2-hydroxyethyl acrylate-
    methacrylic acid-methyl methacrylate-sodium
     vinylsulfonate-N-tert-octylacrylamide copolymer
    RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PRP (Properties);
     PYP (Physical process); TEM (Technical or engineered material
     use); PREP (Preparation); PROC (Process); USES (Uses)
        (prepns. of emulsion polymers for water- and humidity-resistant
        pressure sensitive adhesive
        compns.)
     577-11-7, Aerosol OT 75PG 2373-38-8, Aerosol MA 80I 9051-57-4,
IT
     Aerosol NPES 930 14933-03-0, Emcol K 8300 38916-42-6, Aerosol
        396092-16-3, Witcolate D 51-53
     RL: NUU (Other use, unclassified); USES (Uses)
        (surfactant; prepns. of emulsion polymers for water-
        and humidity-resistant pressure sensitive
        adhesive compns.)
L227 ANSWER 21 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN
                      2002:23627 HCAPLUS <<LOGINID::20060124>>
ACCESSION NUMBER:
DOCUMENT NUMBER:
                         136:71023
TITLE:
                         Peelable pressure-sensitive
                         acrylic adhesives and their adhesive
                         sheets for surface protection
                         Yamanaka, Takeshi; Tosaki, Hiroshi; Sudo,
INVENTOR(S):
                         Takeshi; Miyoshi, Isamu; Shibata, Kenichi
                         Nitto Denko Corp., Japan
Jpn. Kokai Tokkyo Koho, 9 pp.
PATENT ASSIGNEE(S):
SOURCE:
                         CODEN: JKXXAF
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
     PATENT NO.
                       KIND DATE
                                           APPLICATION NO.
                                                                    DATE
     JP 2002003808 A2 20020109 JP 2000-196258
```

PRIORITY APPLN. INFO.:

JP 2000-196258

0626 2000 0626

2000

AB The sheets have layers of the adhesives containing (A) 100 parts water-dispersing copolymers prepared by polymerizing mixts. of CH2:CR1CO2R2 (R1 = H, Me; R2 = C2-14 alkyl) 50-99.9, HO2C-containing monomers 0.1-5, and other monomers 0-49.9% with 0.1-6 parts (on 100 parts of the monomers) nonionic and/or anionic surfactants bearing copolymerizable C:C in aqueous media containing, (B) 0.1-3 parts hinderedamine-based light stabilizers, and optionally (C) 0.1-3 parts benzotriazole-based UV absorbers. The adhesives may further contain (D) water-soluble crosslinking agents bearing oxazoline groups 0.1-5 equiv per 1 equiv of the carboxyl in the copolymers. Thus, 100 parts of a 59:40:1 Bu acrylate/Bu methacrylate/acrylic acid mixture was emulsion-polymerized in water with 0.4 part polyethylene glycol 2-(1'-propenyl)-4-nonylphenyl monoether (I) and 0.2 part I monosulfate ammonium salt, then treated with aqueous NH3 to adjust the pH to 8. A LDPE film applied with an adhesive comprising the obtained polymer emulsion 100 (solid), Tinuvin 770 (light stabilizer) 2, and Epocros WS 500 (crosslinker) 1 part exhibited proper initial adhesion to SUS 430BA plate and was peelable from it without leaving the adhesive after 500 h in a weather-o-meter.

IT 383369-05-9P, Acrylic acid-butyl

acrylate-butyl methacrylate-Epocros WS 500-polyethylene glycol 2-(1'-propenyl)-4-nonylphenyl monoether-polyethylene glycol 2-(1'-propenyl)-4-nonylphenyl monoether monosulfate ammonium salt copolymer

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (peelable pressure-sensitive acrylic

adhesives for weather-resistant surface protection
sheets)

RN 383369-05-9 HCAPLUS

2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, 4,5-dihydro-2-(1-methylethyl)oxazole, α -[4-nonyl-2-(1-propenyl)phenyl]- ω -hydroxypoly(oxy-1,2-ethanediyl), 2-propenoic acid and α -sulfo- ω -[4-nonyl-2-(1-propenyl)phenoxy]poly(oxy-1,2-ethanediyl) ammonium salt (9CI) (CA INDEX NAME)

CM 1

CN

CRN 146847-27-0 CMF (C2 H4 O)n C18 H28 O CCI PMS

$$Me^{-(CH_2)8}$$
 $O-CH_2-CH_2$
 $O+CH=CH-Me$

Sastri 10/774,617

CM 2

CRN 140651-97-4

CMF (C2 H4 O)n C18 H28 O4 S . H3 N

CCI PMS

$$O-CH_2-CH_2$$
 $O-CH_2-CH_2$ $O-CH_2-CH_2$

● NH3

CM 3

CRN 10471-78-0 CMF C6 H9 N O

CM 4

CRN 141-32-2 CMF C7 H12 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{n-BuO-C-CH} \end{array} \text{CH}_2$$

CM 5

CRN 80-62-6 CMF C5 H8 O2

CM 6

```
CRN 79-10-7
CMF C3 H4 O2
```

```
HO-C-CH=CH2
    ICM C09J133-06
IC
     ICS C09J007-02
     38-3 (Plastics Fabrication and Uses)
CC
     acrylic emulsion peelable pressure sensitive
ST
     adhesive; reactive emulsifier acrylic polymer prepn
     adhesive; metal plate surface protection adhesive sheet
IT
     UV stabilizers
        (benzotriazoles; peelable pressure-sensitive
        acrylic adhesives for weather-resistant surface
        protection sheets)
IT
     Light stabilizers
        (hinderedamines; peelable pressure-sensitive
        acrylic adhesives for weather-resistant surface
        protection sheets)
IT
     Adhesives
        (peelable, pressure-sensitive; peelable
        pressure-sensitive acrylic adhesives
        for weather-resistant surface protection sheets)
IT
     Adhesives
        (pressure-sensitive, sheets; peelable
        pressure-sensitive acrylic adhesives
        for weather-resistant surface protection sheets)
IT
     3864-99-1, Tinuvin 327
     RL: MOA (Modifier or additive use); PRP (Properties); TEM
     (Technical or engineered material use); USES (Uses)
        (UV absorber; peelable pressure-sensitive
        acrylic adhesives for weather-resistant surface
        protection sheets)
TT
     52829-07-9, Tinuvin 770
                               71878-19-8, Chimassorb 944FD
    RL: MOA (Modifier or additive use); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
        (light stabilizer; peelable pressure-
        sensitive acrylic adhesives for
        weather-resistant surface protection sheets)
     383369-05-9P, Acrylic acid-butyl
TT
     acrylate-butyl methacrylate-Epocros WS 500-polyethylene glycol
     2-(1'-propenyl)-4-nonylphenyl monoether-polyethylene glycol
     2-(1'-propenyl)-4-nonylphenyl monoether monosulfate ammonium salt
     copolymer
     RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical
     or engineered material use); PREP (Preparation); USES (Uses)
        (peelable pressure-sensitive acrylic
        adhesives for weather-resistant surface protection
        sheets)
L227 ANSWER 22 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN
                         ACCESSION NUMBER:
DOCUMENT NUMBER:
                         136:7740
                         Synthetic resin emulsion and their aqueous
TITLE:
                         primer compositions for recoating
INVENTOR(S):
                         Suzuki, Hideyuki
                         Clariant International Ltd., Switz.
PATENT ASSIGNEE(S):
SOURCE:
                         PCT Int. Appl., 33 pp.
```

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.					KIN	KIND DATE				APPLICATION NO.					DATE	
	WO	2001	- 0924	32		A1		2001	1206		WO	2001	-JP46	67			001 601
		W: RW:	AT,			CY, SE,	-	DK,	ES,	FI,	FR	, GB	, GR,	IE,	IT,	LU,	
	JP	2001	3422	19		A2		2001	1211		JP	2000	-1646	63			
																	000 601
	EP	1236	781			A1		2002	0904		EP	2001	-9345	06		21	001
																	601
	ΕP	1236															
		R:				DE, FI,			FR,	GB,	GR	, IT	, LI,	LU,	NL,	SE,	
	US	2003	1145	87		A1		2003	0619		US	2002	-4808	9			
																	002 627
PRIO	RIT	APP:	LN.	INFO	.:						JP	2000	-1646	63	1	A	
																	000 601
											WO	2001-	JP46	67	Ţ	V	
																	001
																06	601

AB Title emulsions contain resin particles prepared from alkyl (meth)acrylates (containing ≥50% C≤4 alkyl ones)
20-99.5, ethylenic unsatd. acids 0.5-10, and other monomers
0-79.5% in presence of alkyldiphenyl ether disulfonates and having average diameter of 0.01-0.2 μm and glass-transition temperature (Tg) of 15-50°. An acrylic/vinyl acetate-type coating-coated slate plate was left at 50° for 3 days, coated with an emulsion containing 0.09-μm 28:225:210:315 acrylic acid (80%)-Bu acrylate-Me methacrylate-styrene copolymer (prepared in the presence of Dowfax 2A1) with Tg 36°, and dried at room temperature to form a plate with good adhesion to various com. elastic coatings even after soaking in water for 3 days.

IT 25085-19-2P. Acrylic acid-2-ethylhexyl acrylate-styrene

25085-19-2P, Acrylic acid-2-ethylhexyl acrylate-styrene copolymer 27306-39-4P, Acrylic acid-butyl acrylate-methyl methacrylate-styrene copolymer 63103-09-3P, Acrylic acid-butyl acrylate-glycidyl methacrylate-methyl methacrylate-styrene copolymer 166304-77-4P, 2-Acetoacetoxyethyl methacrylate-acrylic acid-butyl acrylate-methyl methacrylate-styrene copolymer 376600-20-3P, Acrylic acid-butyl acrylate-methacrylic acid-methacrylamidoethyl ethyleneurea-methyl methacrylate copolymer

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(low alkyl (meth) acrylate- and styrene-based resin emulsions for aqueous primers with recoatability)

25085-19-2 HCAPLUS RNCN

2-Propenoic acid, polymer with ethenylbenzene and 2-ethylhexyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \text{CH}_2\text{--}\text{O}-\text{CH} \longrightarrow \text{CH}_2\\ \text{CH}_2\text{--}\text{O}-\text{C}-\text{CH} \longrightarrow \text{CH}_2\\ \text{Et}-\text{CH}-\text{Bu}-\text{n} \end{array}$$

CM 2

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CM 3

CRN 79-10-7 CMF C3 H4 O2

$$\begin{matrix} \text{O} \\ || \\ \text{HO-C-CH} = \text{CH}_2 \end{matrix}$$

27306-39-4 HCAPLUS RN CN

2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, ethenylbenzene and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

2 CM

CRN 100-42-5 CMF C8 H8

 $_{\rm H_2C}$ = $_{\rm CH}$ - $_{\rm Ph}$

CM 3

CRN 80-62-6 CMF C5 H8 O2

H₂C 0 || || Me- C- C- OMe

CM 4

CRN 79-10-7 CMF C3 H4 O2

RN 63103-09-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl
2-propenoate, ethenylbenzene, oxiranylmethyl 2-methyl-2-propenoate
and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

CM 2

CRN 106-91-2 CMF C7 H10 O3

CM 3

CRN 100-42-5 CMF C8 H8 $H_2C = CH - Ph$

CM

CRN 80-62-6 CMF C5 H8 O2

H₂C о Me-C-C-OMe

> CM5

CRN 79-10-7 CMF C3 H4 O2

RN 166304-77-4 HCAPLUS

Butanoic acid, 3-oxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with butyl 2-propenoate, ethenylbenzene, methyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM

CRN 21282-97-3 CMF C10 H14 O5

2 CM

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CM 4

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{ccc} ^{\text{H}_2\text{C}} & \text{O} \\ \parallel & \parallel \\ ^{\text{Me-}} \text{C--C-OMe} \end{array}$$

CM 5

CRN 79-10-7 CMF C3 H4 O2

RN 376600-20-3 HCAPLUS

N 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 86261-90-7 CMF C9 H14 N2 O3

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 79-41-4

CMF C4 H6 O2

```
CH<sub>2</sub>
Me-C-CO2H
```

CM

CRN 79-10-7 CMF C3 H4 O2

IC ICM C09D133-06

ICS C09D123-28; C09D005-00; C09D005-02; C08L033-06; B05D007-24

42-7 (Coatings, Inks, and Related Products)

25085-19-2P, Acrylic acid-2-ethylhexyl acrylate-styrene copolymer 27306-39-4P, Acrylic acid-butyl acrylate-methyl methacrylate-styrene copolymer 63103-09-3P , Acrylic acid-butyl acrylate-glycidyl methacrylate-methyl methacrylate-styrene copolymer 166304-77-4P, 2-Acetoacetoxyethyl methacrylate-acrylic acid-butyl

acrylate-methyl methacrylate-styrene copolymer 376600-20-3P, Acrylic acid-butyl acrylate-methacrylic

acid-methacrylamidoethyl ethyleneurea-methyl methacrylate copolymer

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(low alkyl (meth)acrylate- and styrene-based resin emulsions

for aqueous primers with recoatability)

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L227 ANSWER 23 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

6

ACCESSION NUMBER: 2001:747865 HCAPLUS <<LOGINID::20060124>>

DOCUMENT NUMBER: 135:273382

TITLE:

Hydrophilic polymers, pressure -sensitive adhesives and coatings

INVENTOR(S): Holguin, Daniel L.; Barker, H. Paul; Lee, Ivan

S. P.; Lin, Kenneth S.

PATENT ASSIGNEE(S): Avery Dennison Corporation, USA

SOURCE: PCT Int. Appl., 92 pp. CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001074917	A1	20011011	WO 2001-US10036	
				2001

Sastri 10/774,617

01/25/2006

```
0330
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD,
               GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,
               KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
               MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL,
          TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE,
               CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
               PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR,
               NE, SN, TD, TG
      US 6706836
                              В1
                                     20040316
                                                   US 2000-540252
                                                                              2000
                                                                              0331
                                                   US 2001-757980
      US 2001037006
                             A1
                                     20011101
                                                                              2001
                                                                              0110
      US 6653427
                              B2
                                     20031125
     CA 2403661
                              AΑ
                                     20011011
                                                   CA 2001-2403661
                                                                             2001
                                                                              0330
     EP 1274750
                              A1
                                     20030115
                                                   EP 2001-926469
                                                                              2001
                                                                              0330
              AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
              MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
      JP 2003529648
                              T2
                                     20031007
                                                   JP 2001-572604
                                                                              2001
                                                                              0330
PRIORITY APPLN. INFO.:
                                                   US 2000-540252
                                                                             2000
                                                                              0331
                                                   US 2001-757980
                                                                             2001
                                                                             0110
                                                   WO 2001-US10036
                                                                             2001
                                                                             0330
AB
     Gel-free hydrophilic polymers (e.g. homo- or copolymers of
     hydroxyethyl acrylate or hydroxybutyl acrylate low in impurities)
     are prepared without chain transfer agent in alc., in H2O, and in
```

AB Gel-free hydrophilic polymers (e.g. homo- or copolymers of hydroxyethyl acrylate or hydroxybutyl acrylate low in impurities) are prepared without chain transfer agent in alc., in H2O, and in solns. of alc. and H2O. The polymers are useful as hydrophilic pressure-sensitive adhesives, coatings, hydrogels, films, topical compns., cosmetic compns., transdermal drug delivery systems, and carrier for a mucus membrane drug delivery systems. Thus, 2-hydroxyethyl methacrylate having <3% alkylene glycol methacrylate impurities and 0.05-0.1% crosslinker impurities was polymerized in EtOH.

IT 364051-78-5P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(core shell; hydrophilic polymers for pressure
-sensitive adhesives and coatings)

RN 364051-78-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(diethylamino)ethyl ester, polymer with butyl 2-propenoate, 1-ethenyl-2-pyrrolidinone, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, methyl 2-propenoate and trifluoroethyl 2-methyl-2-propenoate, graft (9CI)

(CA INDEX NAME)

CM 1

CRN 38785-10-3 CMF C6 H7 F3 O2 CCI IDS

3 (D1-F)

CM 2

CRN 868-77-9 CMF C6 H10 O3

$$^{\mathrm{H_2C}}_{\parallel}$$
 $^{\mathrm{O}}_{\parallel}$ $^{\mathrm{Me-C-C-C-O-CH_2-CH_2-OH}}$

CM 3

CRN 141-32-2 CMF C7 H12 O2

CM 4

CRN 105-16-8 CMF C10 H19 N O2

CM 5

CRN 96-33-3 CMF C4 H6 O2

571-272-2538

```
MeO-C-CH=CH2
     CM
          6
     CRN 88-12-0
     CMF C6 H9 N O
  CH = CH_2
     CM
          7
     CRN 80-62-6
     CMF
          C5 H8 O2
 H<sub>2</sub>C 0
Me-C-C-OMe
     ICM C08F020-26
IC
     ICS C08F216-04; C08F220-20; B05D003-00; A61K009-16
     35-4 (Chemistry of Synthetic High Polymers)
CC
     Section cross-reference(s): 38, 42
st
     gel free polyhydroxyethyl methacrylate prepn use; pressure
     sensitive adhesive polyhydroxyethyl methacrylate
IT
     Coating materials
        (abrasion-resistant; hydrophilic polymers for pressure
        -sensitive adhesives and coatings)
ΙT
     Drug delivery systems
        (carriers; hydrophilic polymers for pressure
        -sensitive adhesives and coatings and)
IT
     Cosmetics
     Hydrogels
        (hydrophilic polymers for pressure-sensitive
        adhesives and coatings and)
IT
     Adhesives
        (pressure-sensitive; hydrophilic polymers for
        pressure-sensitive adhesives and coatings)
```

(topical; hydrophilic polymers for pressure-sensitive

RL: TEM (Technical or engineered material use); USES (Uses) (with hydrophilic polymers for pressure-sensitive

(core shell; hydrophilic polymers for pressure

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

IT

ΙT

IT

Les Henderson

Drug delivery systems

Polyoxyalkylenes, uses

364051-77-4P 364051-78-5P

adhesives)

adhesives and coatings and)

```
Sastri
       -sensitive adhesives and coatings)
    25249-16-5P, Poly(2-hydroxyethyl methacrylate)
                                                    27175-46-8P,
    Acrylic acid-2-hydroxyethyl methacrylate copolymer 29086-87-1P,
    Poly(4-hydroxybutyl acrylate) 31693-08-0P, 2-Hydroxyethyl
    methacrylate-methacrylic acid copolymer 39990-17-5P,
     4-Hydroxybutyl acrylate-2-hydroxyethyl methacrylate copolymer
     364051-79-6P
    RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical
    or engineered material use); PREP (Preparation); USES (Uses)
        (hydrophilic polymers for pressure-sensitive
        adhesives and coatings)
IT
    25322-68-3, Polyethylene glycol
    RL: TEM (Technical or engineered material use); USES (Uses)
        (with hydrophilic polymers for pressure-sensitive
       adhesives)
REFERENCE COUNT:
                        8
                              THERE ARE 8 CITED REFERENCES AVAILABLE
                              FOR THIS RECORD. ALL CITATIONS AVAILABLE
                              IN THE RE FORMAT
L227 ANSWER 24 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN
```

ACCESSION NUMBER:

DOCUMENT NUMBER: 135:138444

TITLE: Multilayer composite product comprising a pressure-sensitive and heat-resistant adhesive polymer layer with good balance of creep and

heat resistance

INVENTOR(S): Court, Francois; Laurichesse, Christian;

Verge, Christophe

PATENT ASSIGNEE(S): ATOFINA, Fr.

SOURCE: PCT Int. Appl., 26 pp.

A2

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: French FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

WO 2001054896

PATENT NO. KIND DATE APPLICATION NO. ---------_____

0124 WO 2001054896 20020131 **A**3 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL,

TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

20010802 WO 2001-FR222

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR,

NE, SN, TD, TG

FR 2804369 A1 20010803 FR 2000-1146

> 2000 0128

DATE

2001

B1 20020419 FR 2804369

PRIORITY APPLN. INFO.: FR 2000-1146

2000

0128

AB The invention concerns a multilayer composite product comprising at least once successively a first soft or rigid material layer; a second layer consisting of a pressure-sensitive adhesive polymeric film formed by applying on the first layer at least a latex (L1), then by drying said latex; and a third layer consisting of a soft or rigid material, a latex (L1) obtained by emulsion polymerization of the mixture of the following monomers, for 100%: 40-95% of at least a (meth)acrylic or vinyl monomer capable of resulting in a homopolymer having a Tg≤-40°; 2-50% of at least a (meth)acrylic or vinyl monomer capable of resulting in a homopolymer having a Tg≥0°; 1-6% of at least a (meth)acrylic carboxylic monomer; 0-5% of at least (meth)acrylic monomer ethoxylated with 1-20% ethylene oxide mol; 0.075-5% of at least a (meth)acrylic or vinyl monomer comprising a ureido group; and 0-2% of at least an acrylic or vinyl monomer bearing a sulfonate function. TТ 352231-27-7P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (latex; multilayer composite product comprising a pressure-sensitive and temperature-resistant adhesive polymer layer) 352231-27-7 HCAPLUS

RN 352231-27-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-hydroxyethyl 2-propenoate, methyl 2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 86261-90-7 CMF C9 H14 N2 O3

CM 2

CRN 818-61-1 CMF C5 H8 O3

CM 3

CRN 96-33-3 CMF C4 H6 O2

```
MeO-C-CH-CH2
     CM
     CRN 80-62-6
     CMF C5 H8 O2
 H<sub>2</sub>C O
Me-C-C-OMe
         5
     CM
     CRN 79-10-7
     CMF C3 H4 O2
HO- C- CH- CH2
IC
    ICM B32B007-12
     ICS C09J133-06; B32B025-14
CC
     38-3 (Plastics Fabrication and Uses)
     adhesive pressure sensitive heat resistant
     composite multilayer; creep adhesive property
     pressure sensitive adhesive composite
IT
    Adhesives
        (heat-resistant, pressure-sensitive; multilayer
       composite product comprising a pressure-sensitive and
       temperature-resistant adhesive polymer layer)
IT
    Adhesives
        (pressure-sensitive, heat-resistant; multilayer
       composite product comprising a pressure-sensitive and
       temperature-resistant adhesive polymer layer)
    352231-27-7P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical
IT
    or engineered material use); PREP (Preparation); USES (Uses)
        (latex; multilayer composite product comprising a
       pressure-sensitive and temperature-resistant adhesive polymer layer)
L227 ANSWER 25 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN
                        ACCESSION NUMBER:
DOCUMENT NUMBER:
                        135:77890
```

Dissolvable pressure-sensitive

Avery Dennison Corporation, USA

PCT Int. Appl., 32 pp.

Su, Shiaonung J.; Akeley, James P.

adhesives

Patent

English

CODEN: PIXXD2

TITLE:

SOURCE:

LANGUAGE:

INVENTOR(S):

DOCUMENT TYPE:

PATENT ASSIGNEE(S):

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

```
PATENT NO.
                           KIND DATE
                                                APPLICATION NO.
                                                                            DATE
     WO 2001046329
                                    20010628
                                                  WO 2000-US31730
                             A1
                                                                            2000
                                                                            1120
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA,
               CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD,
              GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
              AZ, BY, KG, KZ, MD, RU, TJ, TM
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE,
               CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
              PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     US 6525129
                             B1
                                    20030225
                                               US 1999-469149
                                                                            1999
                                                                            1220
     EP 1242555
                            Α1
                                    20020925 EP 2000-978799
                                                                            2000
                                                                            1120
     EP 1242555
                            B1
                                   20050316
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
              MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
PRIORITY APPLN. INFO.:
                                                  US 1999-469149
                                                                            1999
                                                                            1220
                                                  WO 2000-US31730
                                                                            2000
                                                                            1120
AB
     A dissolvable pressure-sensitive adhesive
     comprises an emulsion acrylic copolymer formed from a plurality of
     monomers comprising an alkyl (meth)acrylate, an N-vinyl
     lactam monomer, and at least one hydroxy-containing (meth) acrylate ester, and preferably at least one modifying
     monomer. The copolymer is preferably blended with one or more
     post-additive, selected from surfactants, plasticizers, and
     mineral salts to enhance its dissolvability. Preferably the
     copolymer has a weight-average mol. weight less than about 120,000.
IT
     346467-22-9P
     RL: IMF (Industrial manufacture); POF (Polymer in formulation);
     PRP (Properties); TEM (Technical or engineered material use); PREP
      (Preparation); USES (Uses)
         (dissolvable pressure-sensitive adhesives)
RN
     346467-22-9 HCAPLUS
     2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,
CN
     ethenyl acetate, 1-ethenyl-2-pyrrolidinone, 2-ethylhexyl
     2-propenoate, 2-hydroxyethyl 2-propenoate, methyl 2-propenoate,
```

2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate and

2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 86261-90-7 CMF C9 H14 N2 O3

$$\begin{picture}(20,10) \put(0,0){\line(1,0){100}} \put(0,0){\line(1,0){1$$

CRN 818-61-1 CMF C5 H8 O3

CM 3

CRN 141-32-2 CMF C7 H12 O2

$$\begin{matrix} \text{O} \\ \parallel \\ \text{n-BuO-C-CH------} \text{CH}_2 \end{matrix}$$

CM 4

CRN 108-05-4 CMF C4 H6 O2

$$AcO-CH=CH_2$$

CM 5

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \text{CH}_2-\text{O-C-CH} = \text{CH}_2 \\ \text{CH}_2-\text{O-C-CH} = \text{CH}_2 \\ \text{Et-CH-Bu-n} \end{array}$$

CM 6

CRN 96-33-3 CMF C4 H6 O2

```
MeO-C-CH-CH2
          7
     CM
     CRN 88-12-0
     CMF C6 H9 N O
  сн=сн₂
          8
     CRN
         79-41-4
     CMF C4 H6 O2
   CH<sub>2</sub>
Me-C-CO2H
     CM
          9
     CRN 79-10-7
     CMF C3 H4 O2
HO-C-CH=CH_2
     ICM C09J133-06
ICS C08F220-12; C08F220-12; C08F220-28; C08F226-06; C08F002-22
IC
CC
     38-3 (Plastics Fabrication and Uses)
ST
     pressure sensitive adhesive dissolvable
     acrylic
IT
     Alcohols, uses
     RL: MOA (Modifier or additive use); USES (Uses)
        (C12-14, ethoxylated, Disponil A 1080; dissolvable
        pressure-sensitive adhesives)
IT
     Surfactants
        (dissolvable pressure-sensitive adhesives)
IT
     Plasticizers
        (polymeric; dissolvable pressure-sensitive
        adhesives)
```

(pressure-sensitive; dissolvable pressure

IT

Adhesives

-sensitive adhesives)

IT 346467-22-9P RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (dissolvable pressure-sensitive adhesives) 631-61-8, Ammonium acetate 9014-90-8 9051-57-4, Alipal CO 436 346587-94-8, Stepan 1861-68 346588-09-8, Plasthall P 900 IT RL: MOA (Modifier or additive use); USES (Uses) (dissolvable pressure-sensitive adhesives) THERE ARE 1 CITED REFERENCES AVAILABLE REFERENCE COUNT: 1 FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L227 ANSWER 26 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2001:453182 HCAPLUS <<LOGINID::20060124>> DOCUMENT NUMBER: 135:47673 TITLE: Internally plasticized and low VOC latex compositions, ethyleneically unsaturated carboxylate monomer, and their coating, adhesive or ink applications Thames, Shelby Freland; Wang, Zhiyu; INVENTOR(S): Hariharan, Rajan; Panjnani, Kamlesh Gopichand; Brister, Elizabeth H.; King, Corey L. University of Southern Mississippi, USA PATENT ASSIGNEE(S): PCT Int. Appl., 62 pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE - - - **-**WO 2001044380 A2 20010621 WO 2000-US33577 2000 1211 WO 2001044380 **A**3 20011213 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG US 6624223 В1 20030923 US 1999-460946

1999 1214 PRIORITY APPLN. INFO.: US 1999-460946 A 1999 1214

US 1996-773741 A2 1996

1224

OTHER SOURCE(S): MARPAT 135:47673

AB Novel latex or emulsion compns. containing internally plasticizing and

crosslinkable monomers are derived from traditional semi-drying or nondrying oils. The monomers are ethylenically unsatd. esters of long-chain olefinic compds. Latex are formed from acrylate or methacrylate esters of hydroxy fatty acid esters derived from castor oil or lesquerella oil. The synthesis of the latex composition involves (a) an esterification reaction of ethylenically unsatd. carboxylic acid or its derivs. with a substituted hydroxy long-chain olefinic compound, (b) subsequent polymerization of the so formed ethylenically unsatd. ester of a long-chain olefinic compound in an aqueous phase with ≥ 1 other copolymerizable monomer, and (c) blending with ≥1 drier and a surfactant. These compns. form films at low min. film forming temps. (MFT) -5 to 10° and cure to above ambient glass transition (Tg) polymers without the use of traditional organic cosolvents which contribute to environmental pollution via volatile organic compds. (VOCs) emissions. These compns. are useful in waterborne coatings, contact and pressure sensitive adhesives, and inks. Coating films utilizing Bu acrylate-Me methacrylate-acrylated Me ricinoleate (10%) copolymer (preparation given) showed tan δ temperature 24.3°, scrub resistance (ML 200) 186, and 8 wk blocking resistance 7.5; vs. 17.5°, 563, and 1.0, resp., using Bu acrylate-Me methacrylate-methacrylic acid copolymer latex.

IT 219696-90-9P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (latex; low min. film forming temperature and high Tg, internally plasticizing, and low VOC latex coating compns.)

RN 219696-90-9 HCAPLUS

9-Octadecenoic acid, 12-[(1-oxo-2-propenyl)oxy]-, methyl ester, (9Z,12R)-, polymer with butyl 2-propenoate and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CN

CRN 14202-22-3 CMF C22 H38 O4

Absolute stereochemistry.
Double bond geometry as shown.

CM 2

CRN 141-32-2 CMF C7 H12 O2

CRN 80-62-6 CMF C5 H8 O2

IT 330197-59-6P 330197-63-2P 330197-65-4P 330197-68-7P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (low min. film forming temperature and high Tg, internally plasticizing, and low VOC latex coating compns.)

RN 330197-59-6 HCAPLUS

CN 9-Octadecenoic acid, 12-[(1-oxo-2-propenyl)oxy]-, methyl ester,
 (9Z,12R)-, polymer with butyl 2-propenoate and ethenyl acetate
 (9CI) (CA INDEX NAME)

CM 1

CRN 14202-22-3 CMF C22 H38 O4

Absolute stereochemistry.

Double bond geometry as shown.

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 108-05-4 CMF C4 H6 O2

ACO-CH-CH2

RN 330197-63-2 HCAPLUS

11-Eicosenoic acid, 14-[(1-oxo-2-propenyl)oxy]-, methyl ester, (11Z,14R)-, polymer with butyl 2-propenoate, ethenyl acetate, ethenyl tert-decanoate, 1-[2-[[2-hydroxy-3-(2-propenyloxy)propyl]amino]ethyl]-2-imidazolidinone, 2-methyl-N-[2-(2-oxo-1-imidazolidinyl)ethyl]-2-propenamide and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 330197-62-1 CMF C24 H42 O4

Absolute stereochemistry.
Double bond geometry as shown.

MeO
$$(CH_2)$$
 $\frac{0}{9}$ $\frac{CH_2}{Z}$ $\frac{0}{R}$ $\frac{CH_2}{CH_2}$ $\frac{1}{5}$ $\frac{1}{5}$

CM 2

CRN 85356-84-9 CMF C11 H21 N3 O3

CM 3

CRN 26544-09-2 CMF C12 H22 O2 CCI IDS

CM 4

CRN 3089-19-8 CMF C9 H15 N3 O2

$$\begin{array}{c|c}
H & O & CH_2 \\
N & O & CH_2 \\
 & \parallel & \parallel \\
 & CH_2 - CH_2 - NH - C - C - Me
\end{array}$$

CRN 141-32-2 CMF C7 H12 O2

CM 6

CRN 108-05-4 CMF C4 H6 O2

CM 7

CRN 79-41-4 CMF C4 H6 O2

$$\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me-C-CO}_2 \text{H} \end{array}$$

RN 330197-65-4 HCAPLUS CN 11-Eicosenoic acid, 3

11-Eicosenoic acid, 14-[(1-oxo-2-propenyl)oxy]-, methyl ester, (11Z,14R)-, polymer with butyl 2-propenoate, ethenylbenzene, 1-[2-[(2-hydroxy-3-(2-propenyloxy)propyl]amino]ethyl]-2-imidazolidinone, 2-methyl-N-[2-(2-oxo-1-imidazolidinyl)ethyl]-2-propenamide and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 330197-62-1 CMF C24 H42 O4

Absolute stereochemistry.

Double bond geometry as shown.

CRN 85356-84-9 CMF C11 H21 N3 O3

CM 3

CRN 3089-19-8 CMF C9 H15 N3 O2

$$\begin{array}{c|c} H & O & \\ \hline & N & O & CH_2 \\ \hline & & \parallel & \parallel \\ CH_2-CH_2-NH-C-C-Me & \end{array}$$

CM 4

CRN 141-32-2 CMF C7 H12 O2

CM 5

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CRN 79-41-4 CMF C4 H6 O2

RN 330197-68-7 HCAPLUS

CN 11-Eicosenoic acid, 14-[(1-oxo-2-propenyl)oxy]-, methyl ester, (11Z,14R)-, polymer with butyl 2-propenoate, 2-hydroxy-1-(2-propenyloxy)-1-propanesulfonic acid monosodium salt, 1-[2-[[2-hydroxy-3-(2-propenyloxy)propyl]amino]ethyl]-2-imidazolidinone, methyl 2-methyl-2-propenoate, 2-methyl-N-[2-(2-oxo-1-imidazolidinyl)ethyl]-2-propenamide, 2-methyl-2-propenoic acid and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 330197-62-1 CMF C24 H42 O4

Absolute stereochemistry.

Double bond geometry as shown.

CM 2

CRN 143187-46-6 CMF C6 H12 O5 S . Na

• Na

CM 3

CRN 85356-84-9 CMF C11 H21 N3 O3

$$\begin{array}{c|c}
H & O & OH \\
N & OH & CH_2 - CH_2 - NH - CH_2 - CH - CH_2 - O - CH_2 - CH = CH_2
\end{array}$$

CRN 3089-19-8 CMF C9 H15 N3 O2

CM 5

CRN 141-32-2 CMF C7 H12 O2

$$\begin{array}{c} {\overset{\mathsf{O}}{\parallel}} \\ {\mathsf{n}}\text{-}{\mathtt{BuO}}\text{-}{\mathtt{C}}\text{-}{\mathtt{CH}}\text{---}{\mathtt{CH}}_2 \end{array}$$

CM 6

CRN 80-62-6 CMF C5 H8 O2

CM 7

CRN 79-41-4 CMF C4 H6 O2

$$\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me-} \text{C-} \text{CO}_2 \text{H} \end{array}$$

CM 8

```
CRN 79-10-7
CMF C3 H4 O2
```

```
HO- C- CH CH2
```

IC ICM C09D004-02

ICS C09D011-06; C09J004-02; C07C069-732

42-7 (Coatings, Inks, and Related Products)

IT Adhesives

CC

(pressure-sensitive; low min. film forming

temperature and high Tg, internally plasticizing, and low VOC latex coating compns.)

219696-90-9P IT

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(latex; low min. film forming temperature and high Tg, internally

plasticizing, and low VOC latex coating compns.)

ΙT 108-05-4DP, Vinyl acetate, polymer with Bu acrylate and castor oil methacrylate 141-32-2DP, Butyl acrylate, polymer with vinyl acetate and castor oil methacrylate 85356-84-9DP, Sipomer WAM, polymer with acrylate, and lesquerella oil acrylate 98716-57-5P, Methyl ricinoleate methacrylate-vinyl acetate copolymer

330197-59-6P 330197-63-2P 330197-65-4P

330197-68-7P 330197-70-1P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (low min. film forming temperature and high Tg, internally plasticizing, and low VOC latex coating compns.)

L227 ANSWER 27 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2001:319420 HCAPLUS <<LOGINID::20060124>>

DOCUMENT NUMBER: 134:326931

TITLE:

Multistage emulsion polymer and coatings

containing it

INVENTOR(S):

Pakusch, Joachim; Dittrich, Uwe; Roeckel,

Harald; Smith, Alan; Gulbins, Erich; Zhuo, Li

PATENT ASSIGNEE(S):

BASF A.-G., Germany Ger. Offen., 20 pp.

SOURCE:

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19952671	A1	20010503	DE 1999-19952671	1999
US 6552116	В1	20030422	US 2000-703875	1102 2000
PRIORITY APPLN. INFO.:			DE 1999-19952671 A	1102 1999
				1999 1102

Sastri 10/774,617 01/25/2006

```
AB
     An emulsion polymer, useful as a binder in high-gloss paints,
     comprises a first domain having a glass-transition temperature (Tg) from
     -10° to +40° and a second domain having a Tg of
     50-120°, whereby the weight ratio of the first to the second
     domain is 90:10 to 50:50, the first domain incorporates polymerized
     units of (a) Me and/or Et methacrylate 5-60, (b)
     C4-12-alkyl acrylate(s) 20-80, (c) vinylarom. compds.
     0-50, (d) ethylenically unsatd. carboxylic acids 0.01-5, (e)
     ethylenically unsatd. amides 0-5, and (f) other ethylenically
     unsatd. monomers 0-10 weight% and the second domain incorporates
     polymerized units of (a) Me and/or Et methacrylate 0-99.9,
     (b) vinylarom. compds. and/or C4-12-alkyl methacrylate
     (s) 0-99.9, (c) ethylenically unsatd. carboxylic acids 0.1-5, (d)
     ethylenically unsatd. amides 0-10, and (e) other ethylenically
     unsatd. monomers 0-10 weight%, provided that at least one of the
     domains contains 0.1-10 weight% of a N-containing linking monomer
     (especially ureidoethyl methacrylate) and that (1) the first
     domain contains ≥10 weight% vinylarom. monomer and/or (2) the
     second domain contains ≥15 weight% vinylarom. monomer and/or
     C4-12-alkyl methacrylate. Thus, in a first stage acrylamide 2.00, acrylic acid 3.75, N-(2-
     methacryloyloxyethyl) ethyleneurea 10.00, Me methacrylate
     100.00, styrene 70.00, and Bu acrylate 190.00 g were
     polymerized with Na2S2O8 in an aqueous dispersion of 12.50 g polystyrene
     seed crystals at 85° and in a second stage 120.50 g Me methacrylate and 3.75 g acrylic acid were added and
     copolymd., after which the polymer was neutralized with NH3 to
     give a polymer dispersion (48.9% solids) with pH 6.7 and average
     particle size 115 nm. This binder dispersion was mixed with a
     pigment paste (predominantly TiO2) and applied to a test panel and
     cured to give a coating with 60° gloss 84% and good
     adhesion.
     135836-18-9P, Acrylic acid-butyl acrylate
     -N-(2-methacryloyloxyethyl)ethyleneurea-methyl
     methacrylate-styrene copolymer 337367-52-9P
     337367-58-5P, Acrylamide-acrylic acid-butyl
     acrylate-N-(2-methacryloyloxyethyl)ethyleneurea-styrene
     copolymer 337367-71-2P 337367-84-7P,
     Acrylamide-acrylic acid-butyl acrylate
     -N-(2-methacryloyloxyethyl)ethyleneurea-methyl
     methacrylate copolymer 337367-95-0P,
     Acrylamide-butyl acrylate-methacrylic
     acid-N-(2-methacryloyloxyethyl)ethyleneurea-methyl
     methacrylate-styrene copolymer
     RL: IMF (Industrial manufacture); TEM (Technical or engineered
     material use); PREP (Preparation); USES (Uses)
        (core; multistage emulsion polymer as binder for glossy
        coatings)
     135836-18-9 HCAPLUS
CN
     2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl
     2-propenoate, ethenylbenzene, 2-(2-oxo-1-imidazolidinyl)ethyl
     2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)
     CM
          1
     CRN 86261-90-7
     CMF C9 H14 N2 O3
```

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 100-42-5 CMF C8 H8

CM 4

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c|c} ^{\text{H}_2\text{C}} \circ \\ \parallel & \parallel \\ \text{Me-} \text{C-} \text{C-} \text{OMe} \end{array}$$

CM

CRN 79-10-7 CMF C3 H4 O2

RN

337367-52-9 HCAPLUS
2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl
2-propenoate, ethenylbenzene, 2-(2-oxo-1-imidazolidinyl)ethyl CN2-methyl-2-propenoate, 2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1 CRN 86261-90-7 CMF C9 H14 N2 O3

$$\begin{picture}(20,10) \put(0,0){\line(1,0){100}} \put(0,0){\line(1,0){1$$

CM 2

CRN 141-32-2 CMF C7 H12 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{n-BuO-C-CH-----} \text{CH}_2 \end{array}$$

CM 3

CRN 100-42-5 CMF C8 H8

$$_{\rm H_2C} = _{\rm CH^-Ph}$$

CM 4

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{ccc} ^{H_2C} & \text{O} \\ \parallel & \parallel \\ \text{Me-} & \text{C-} & \text{C-} & \text{OMe} \end{array}$$

CM 5

CRN 79-10-7 CMF C3 H4 O2

CM 6

CRN 79-06-1 CMF C3 H5 N O

RN 337367-58-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-(2-oxo-1-imidazolidinyl)ethyl ester, polymer with butyl 2-propenoate, ethenylbenzene, 2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 86261-90-7 CMF C9 H14 N2 O3

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CM 4

CRN 79-10-7 CMF C3 H4 O2

CRN 79-06-1 CMF C3 H5 N O

$$H_2N-C-CH=CH_2$$

RN 337367-71-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenylbenzene, methyl 2-methyl-2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 86261-90-7 CMF C9 H14 N2 O3

$$\begin{array}{c|c} H & O & \\ \hline & N & O & CH_2 \\ \hline & & || & || \\ CH_2-CH_2-O-C-C-Me \end{array}$$

CM 2

CRN 141-32-2 CMF C7 H12 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{n-BuO-C-CH-----} \text{CH}_2 \end{array}$$

CM 3

CRN 100-42-5 CMF C8 H8

 $_{\rm H_2C} = _{\rm CH} - _{\rm Ph}$

CM 4

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c|c} ^{H_2C} & \text{O} \\ & || & || \\ \text{Me-} & \text{C-} & \text{C-} & \text{OMe} \end{array}$$

CRN 79-41-4 CMF C4 H6 O2

$$\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me-C-CO}_2 \text{H} \end{array}$$

CM 6

CRN 79-10-7 CMF C3 H4 O2

RN 337367-84-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate, 2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 86261-90-7 CMF C9 H14 N2 O3

CM 2

CRN 141-32-2 CMF C7 H12 O2

$$\begin{matrix} \text{O} \\ \parallel \\ \text{n-BuO-C-CH} \end{matrix} = \text{CH}_2$$

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{ccc} ^{\text{H}_2\text{C}} & \text{O} \\ & \parallel & \parallel \\ \text{Me-C-C-OMe} \end{array}$$

CM 4

CRN 79-10-7 CMF C3 H4 O2

CM 5

CRN 79-06-1 CMF C3 H5 N O

RN 337367-95-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenylbenzene, methyl 2-methyl-2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 86261-90-7 CMF C9 H14 N2 O3

$$\begin{array}{c|c} H & O & \\ \hline & N & O & CH_2 \\ \hline & & || & || \\ CH_2-CH_2-O-C-C-Me \end{array}$$

CM 2

CRN 141-32-2 CMF C7 H12 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{n-BuO-C-CH-CH_2} \end{array}$$

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CM 4

CRN 80-62-6 CMF C5 H8 O2

CM 5

CRN 79-41-4 CMF C4 H6 O2

CM 6

CRN 79-06-1 CMF C3 H5 N O

```
CN
     2-Propenoic acid, 2-methyl-, methyl ester, polymer with
     2-propenoic acid, ammonium salt (9CI) (CA INDEX NAME)
     CM 1
     CRN 25322-25-2
     CMF (C5 H8 O2 . C3 H4 O2)\times
     CCI PMS
          CM
               2
          CRN 80-62-6
          CMF C5 H8 O2
 H<sub>2</sub>C O
Me- C- C- OMe
          CM
               3
          CRN 79-10-7
          CMF C3 H4 O2
   0
HO- C- CH CH2
RN
     86609-74-7 HCAPLUS
     2-Propenoic acid, 2-methyl-, methyl ester, polymer with
CN
     ethenylbenzene and 2-propenoic acid, ammonium salt (9CI) (CA
     INDEX NAME)
     CM
         1
     CRN 25767-39-9
     CMF (C8 H8 . C5 H8 O2 . C3 H4 O2)\times
     CCI PMS
          CM
          CRN 100-42-5
          CMF C8 H8
H_2C = CH - Ph
          CM
               3
```

CRN 80-62-6 CMF C5 H8 O2

CRN 79-10-7 CMF C3 H4 O2

$$\begin{matrix} \text{O} \\ || \\ \text{HO-C-CH} = \text{CH}_2 \end{matrix}$$

RN 337367-62-1 HCAPLUS

2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate and 2-propenoic acid, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 337367-61-0

(C9 H14 N2 O3 . C5 H8 O2 . C3 H4 O2)xCMF

CCI PMS

> CM 2

CRN 86261-90-7

CMF C9 H14 N2 O3

CM3

CRN 80-62-6 CMF C5 H8 O2

CM

CRN 79-10-7 CMF C3 H4 O2

RN 337367-68-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenylbenzene, 2-(2-oxo-1-imidazolidinyl)ethyl
2-methyl-2-propenoate and 2-propenoic acid, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CM 2

CRN 86261-90-7 CMF C9 H14 N2 O3

$$\begin{array}{c|c} H & O & \\ \hline & N & O & CH_2 \\ \hline & CH_2-CH_2-O-C-C-Me \end{array}$$

CM 3

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CM 4

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c|c} ^{\text{H}_2\text{C}} & \text{O} \\ & || & || \\ \text{Me-C-C-C-OMe} \end{array}$$

CM 5

CRN 79-10-7 CMF C3 H4 O2

RN 337367-76-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with methyl

2-methyl-2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl

2-methyl-2-propenoate and 2-propenoic acid, ammonium salt (9CI)

(CA INDEX NAME)

CM 1

CRN 337367-75-6

CMF (C9 H14 N2 O3 . C5 H8 O2 . C4 H6 O2 . C3 H4 O2) $\mathbf x$

CCI PMS

CM 2

CRN 86261-90-7

CMF C9 H14 N2 O3

CM 3

CRN 80-62-6

CMF C5 H8 O2

CM 4

CRN 79-41-4

CMF C4 H6 O2

CM 5

CRN 79-10-7

CMF C3 H4 O2

0 || но- с- сн== сн₂

RN 337367-81-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene, methyl 2-methyl-2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate and 2-propenoic acid, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CM 2

CRN 86261-90-7 CMF C9 H14 N2 O3

$$\begin{array}{c|c} H & O & CH_2 \\ \hline & N & O & CH_2 \\ \hline & || & || & \\ CH_2-CH_2-O-C-C-Me \end{array}$$

CM 3

CRN 100-42-5 CMF C8 H8

 $_{\rm H_2C} = _{\rm CH} - _{\rm Ph}$

CM 4

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{ccc} ^{\text{H}_2\text{C}} & \text{O} \\ & || & || \\ \text{Me-C-C-OMe} \end{array}$$

CM 5

CRN 79-41-4 CMF C4 H6 O2



CRN 79-10-7 CMF C3 H4 O2

337367-89-2 HCAPLUS RN

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with methyl 2-methyl-2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate and 2-propenoic acid, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 337367-88-1

CMF (C9 H14 N2 O3 . C8 H14 O2 . C5 H8 O2 . C3 H4 O2)x

CCI PMS

> CM 2

CRN 86261-90-7 CMF C9 H14 N2 O3

$$\begin{array}{c|c} H & O & \\ \hline & N & O & CH_2 \\ \hline & & \parallel & \parallel \\ & CH_2-CH_2-O-C-C-Me \end{array}$$

3 CM

CRN 97-88-1 CMF C8 H14 O2

CM

CRN 80-62-6 CMF C5 H8 O2

CRN 79-10-7 CMF C3 H4 O2

```
HO-C-CH=CH<sub>2</sub>
```

IC ICM C08F220-18

ICS C08F212-00; C08L033-04

CC 35-5 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 42

IT 135836-18-9P, Acrylic acid-butyl acrylate
-N-(2-methacryloyloxyethyl)ethyleneurea-methyl
methacrylate-styrene copolymer 337367-52-9P
337367-58-5P, Acrylamide-acrylic acid-butyl

acrylate-N-(2-methacryloyloxyethyl)ethyleneurea-styrene

copolymer 337367-71-2P 337367-84-7P, Acrylamide-acrylic acid-butyl acrylate

-N-(2-methacryloyloxyethyl)ethyleneurea-methyl

methacrylate copolymer 337367-95-0P, Acrylamide-butyl acrylate-methacrylic

acid-N-(2-methacryloyloxyethyl)ethyleneurea-methyl

methacrylate-styrene copolymer

RL: IMF (Industrial manufacture); TEM (Technical or engineered

material use); PREP (Preparation); USES (Uses)

(core; multistage emulsion polymer as binder for glossy coatings)

IT 35209-54-2P, Acrylic acid-styrene copolymer, ammonium salt

82930-89-0P, Acrylic acid-methyl methacrylate copolymer, ammonium salt 86609-74-7P, Acrylic

acid-methyl methacrylate-styrene copolymer, ammonium

salt 337367-62-1P 337367-68-7P

337367-76-7P 337367-81-4P 337367-89-2P

RL: IMF (Industrial manufacture); TEM (Technical or engineered

material use); PREP (Preparation); USES (Uses)

(shell; multistage emulsion polymer as binder for glossy coatings)

L227 ANSWER 28 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:192564 HCAPLUS <<LOGINID::20060124>>

DOCUMENT NUMBER: 134:239014

TITLE: Low MFT and high Tg , internally plasticizing,

and low VOC latex coating compositions

INVENTOR(S): Thames, Shelby Freland; Panjnani, Kamlesh Gopichand; Hariharan, Rajan; Wang, Zhiyu

PATENT ASSIGNEE(S): University of Southern Mississippi, USA SOURCE: U.S., 18 pp.

OURCE: U.S., 18 pp.
CODEN: USXXAM

DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6203720	B1	20010320	US 1996-773741	
				1996 1224
US 6624223	B1	20030923	US 1999-460946	1999
US 2003045609	A1	20030306	US 2002-118586	1214
US 6897257	B2	20050524		2002 0408
PRIORITY APPLN. INFO.:	BZ	20030324	US 1996-773741	A2 1996 1224
			US 1999-460946 A	A2 1999 1214

AΒ Latex or emulsion compns. contain internally plasticizing and crosslinkable monomers derived from traditional semi-drying or nondrying oils. The monomers are ethylenically unsatd. esters of long-chain olefinic compds., preferably acrylate or methacrylate esters of hydroxy fatty acid esters derived from castor oil or lesquerella oil. The latex composition is made by (a) an esterification reaction of ethylenically unsatd. carboxylic acid or its derivs. with a substituted hydroxy long-chain olefinic compound, (b) subsequent polymerization of the ethylenically unsatd. ester of a long-chain olefinic compound in an aqueous phase with ≥ 1 other copolymerizable monomer, and (c) blending polymer with ≥1 drier and a surfactant. These compns. form films at low min. film forming temps. (MFT) -5 to 10° and cure to above ambient glass transition (Tg) without the use of traditional organic cosolvents which contribute to environmental pollution via volatile organic compds. (VOCs) emissions. compns. are useful in waterborne coatings, contact and pressure sensitive adhesives, and inks. An ink formulation contained acrylated Me lesquerolate monomer (preparation given) 21.4, Fluorescent rocket red AX-135 1.0, Photomer 3016 17.0, Photomer 4061 19.0, Photomer 4094 15.6, Photomer 4149 4.4, Photomer 4770 5.5, Photomer 6008 11.2, Byk 065 0.4, Byk 358 0.3, Byk 325 0.3, Irgacure 651 2.7, and benzophenone 1.3 parts.

IT 330197-59-6P 330197-63-2P 330197-65-4P

330197-68-7P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (low min. film forming temperature and high Tg, internally plasticizing, and low VOC latex coating compns.)

RN 330197-59-6 HCAPLUS

9-Octadecenoic acid, 12-[(1-oxo-2-propenyl)oxy]-, methyl ester, (9Z,12R)-, polymer with butyl 2-propenoate and ethenyl acetate (9CI) (CA INDEX NAME)

CM 1

CN

CRN 14202-22-3 CMF C22 H38 O4 Absolute stereochemistry.

Double bond geometry as shown.

MeO (CH₂)
$$\frac{0}{7}$$
 $\frac{0}{Z}$ R (CH₂) $\frac{0}{5}$ Me

CM 2

CRN 141-32-2 CMF C7 H12 O2

$$\begin{array}{c}
0 \\ \parallel \\
n-BuO-C-CH \longrightarrow CH_2
\end{array}$$

CM 3

CRN 108-05-4 CMF C4 H6 O2

 $Aco-CH=CH_2$

RN 330197-63-2 HCAPLUS

CN 11-Eicosenoic acid, 14-[(1-oxo-2-propenyl)oxy]-, methyl ester, (11Z,14R)-, polymer with butyl 2-propenoate, ethenyl acetate, ethenyl tert-decanoate, 1-[2-[[2-hydroxy-3-(2-propenyloxy)propyl]amino]ethyl]-2-imidazolidinone, 2-methyl-N-[2-(2-oxo-1-imidazolidinyl)ethyl]-2-propenamide and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 330197-62-1 CMF C24 H42 O4

Absolute stereochemistry.

Double bond geometry as shown.

MeO
$$(CH_2)$$
 g Z R (CH_2) g Me

CM 2

CRN 85356-84-9 CMF C11 H21 N3 O3

$$\begin{array}{c|c}
 & \text{H} & \text{O} \\
 & \text{N} & \text{OH} \\
 & \text{CH}_2 - \text{CH}_2 - \text{NH} - \text{CH}_2 - \text{CH} - \text{CH}_2 - \text{O} - \text{CH}_2 - \text{CH} = \text{CH}_2
\end{array}$$

CM 3

CRN 26544-09-2 CMF C12 H22 O2 CCI IDS

CM 4

CRN 3089-19-8 CMF C9 H15 N3 O2

$$\begin{picture}(20,10) \put(0,0){\line(1,0){100}} \put(0,0){\line(1,0){10$$

CM 5

CRN 141-32-2 CMF C7 H12 O2

CM 6

CRN 108-05-4 CMF C4 H6 O2

 $AcO-CH=CH_2$

CRN 79-41-4 CMF C4 H6 O2

CN

RN 330197-65-4 HCAPLUS

11-Eicosenoic acid, 14-[(1-oxo-2-propenyl)oxy]-, methyl ester, (11Z,14R)-, polymer with butyl 2-propenoate, ethenylbenzene, 1-[2-[[2-hydroxy-3-(2-propenyloxy)propyl]amino]ethyl]-2-imidazolidinone, 2-methyl-N-[2-(2-oxo-1-imidazolidinyl)ethyl]-2-propenamide and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 330197-62-1 CMF C24 H42 O4

Absolute stereochemistry.

Double bond geometry as shown.

CM 2

CRN 85356-84-9 CMF C11 H21 N3 O3

CM 3

CRN 3089-19-8 CMF C9 H15 N3 O2

CRN 141-32-2 CMF C7 H12 O2

CM 5

CRN 100-42-5 CMF C8 H8

 $H_2C == CH - Ph$

CM 6

CRN 79-41-4 CMF C4 H6 O2

$$\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me-- C-- CO}_2\text{H} \end{array}$$

RN 330197-68-7 HCAPLUS

CN 11-Eicosenoic acid, 14-[(1-oxo-2-propenyl)oxy]-, methyl ester, (11Z,14R)-, polymer with butyl 2-propenoate, 2-hydroxy-1-(2-propenyloxy)-1-propanesulfonic acid monosodium salt, 1-[2-[[2-hydroxy-3-(2-propenyloxy)propyl]amino]ethyl]-2-imidazolidinone, methyl 2-methyl-2-propenoate, 2-methyl-N-[2-(2-oxo-1-imidazolidinyl)ethyl]-2-propenamide, 2-methyl-2-propenoic acid and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 330197-62-1 CMF C24 H42 O4

Absolute stereochemistry. Double bond geometry as shown.

MeO
$$(CH_2)$$
 $\frac{0}{9}$ $\frac{0}{Z}$ R (CH_2) $\frac{0}{5}$ Me (CH_2) $\frac{1}{5}$ R $\frac{1}{5}$ $\frac{1}{5}$ R $\frac{1}{5}$ R $\frac{1}{5}$ R $\frac{1}{5}$ R $\frac{1}{5}$ $\frac{1}{5}$ R $\frac{1}{5}$ $\frac{1}{5}$ $\frac{1}{5}$ $\frac{1}{5}$ $\frac{1}{5$

Na

CM 3

CRN 85356-84-9 CMF C11 H21 N3 O3

CM 4

CRN 3089-19-8 CMF C9 H15 N3 O2

$$\begin{array}{c|c} H & \\ N & O \\ \hline & N & O & CH_2 \\ & \parallel & \parallel \\ & CH_2-CH_2-NH-C-C-Me \end{array}$$

CM 5

```
- CH== CH2
     CM
     CRN 80-62-6
     CMF C5 H8 O2
 H<sub>2</sub>C O
  . | | |
Me-C-C-OMe
          7
     CM
     CRN 79-41-4
     CMF C4 H6 O2
   CH<sub>2</sub>
Me-C-CO2H
     CM
     CRN 79-10-7
     CMF C3 H4 O2
   O
HO-C-CH=CH2
  ICM C09K003-00
IC
INCL 252182120
    42-12 (Coatings, Inks, and Related Products)
IT
        (pressure-sensitive; low min. film forming
        temperature and high Tg, internally plasticizing, and low VOC latex
        coating compns.)
    108-05-4DP, Vinyl acetate, polymer with Bu acrylate and castor oil
    methacrylate 141-32-2DP, Butyl acrylate, polymer with vinyl
    acetate and castor oil methacrylate 85356-84-9DP, Sipomer WAM,
    polymer with acrylate, and lesquerella oil acrylate 98716-57-5P,
    Methyl ricinoleate methacrylate-vinyl acetate copolymer
    330197-59-6P 330197-63-2P 330197-65-4P
    330197-68-7P 330197-70-1P
    RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical
    or engineered material use); PREP (Preparation); USES (Uses)
        (low min. film forming temperature and high Tg, internally
        plasticizing, and low VOC latex coating compns.)
```

REFERENCE COUNT:

14

THERE ARE 14 CITED REFERENCES AVAILABLE

FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L227 ANSWER 29 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

2000:802401 HCAPLUS <<LOGINID::20060124>> ACCESSION NUMBER:

DOCUMENT NUMBER: 133:351243

TITLE: Pressure-sensitive

adhesives for marking films

INVENTOR(S): Lee, Ivan S. P.; Yeadon, Graham; Keller, Paul

PATENT ASSIGNEE(S):

Avery Dennison Corporation, USA
U.S., 13 pp., Cont.-in-part of U.S. 5,895,801.
CODEN: USXXAM SOURCE:

DOCUMENT TYPE:

Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

·US 6147165 A 20001114 US 1998-37589 0309
·US 6147165 A 20001114 US 1998-37589 1998 0309
0309
US 5895801 A 19990420 US 1997-829002 1997
0331
CA 2285406 AA 19981008 CA 1998-2285406
1998 0317
CA 2285406 C 20040316
WO 9844064 A1 19981008 WO 1998-US5203
1998
0317 W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU,
CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL,
IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV,
MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,
SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU,
ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK,
ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG EP 971994 A1 20000119 EP 1998-911723
1998 AT 20000119 BF 1996-911723
0317
EP 971994 B1 20041117
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
MC, PT, IE, FI AT 282677 E 20041215 AT 1998-911723
1998
0317
US 6569949 B1 20030527 US 2000-586122
2000
0602
PRIORITY APPLN. INFO.: US 1997-829002 A2
1997 0331
0331
US 1998-37589 A
1998
0309

WO 1998-US5203

1998 0317

AΒ Inherently tacky, pressure-sensitive adhesive compns. useful in marking film applications are provided. The compns. comprise polymer particles prepared by emulsion polymerization of at least one monomer mixture and a surfactant system comprising at least one surfactant selected from the group consisting of sodium lauryl ether surfactants and sodium dioctyl sulfosuccinate **surfactants**. The monomer mixture comprises at least one alkyl acrylate, the alkyl group of which has from about 4 to 12 carbon atoms, preferably in an amount of from about 73% to 90% by weight, at least one unsatd. carboxylic acid containing from about 3 to 5 carbon atoms, preferably in an amount of from about 2% to 12% by weight, and at least one styrenic monomer, preferably present in an amount of from about 5% to 15% by weight The particles typically have a mean diameter of about 300 nm or less, as determined by laser light scattering. In some embodiments, the compns. are prepared by sequential polymerization of the first and second monomer charges. The compns. may also contain one or more internal or external crosslinkers. IT 148446-50-8P, Acrylic Acid-Butyl

Acrylate-2-EthylHexyl Acrylate-Methacrylic Acid
-Methyl Methacrylate-Styrene copolymer 213921-80-3P,
Acrylic Acid-Butyl Acrylate-2-Ethylhexyl
Acrylate-Methacrylic Acid-Tripropylene glycol

Acrylate-Methacrylic Acid-Tripropylene glycol diacrylate-Vinyl Acetate copolymer

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(pressure-sensitive adhesives for

marking films)

RN 148446-50-8 HCAPLUS CN 2-Propenoic acid, 2-m

2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenylbenzene, 2-ethylhexyl 2-propenoate, methyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

O || n-BuO- C- CH--- CH₂

CM 2

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \text{CH}_2\text{--}\text{O}-\text{CH} = \text{CH}_2\\ \text{CH}_2\text{--}\text{O}-\text{C}-\text{CH} = \text{CH}_2\\ \text{Et}-\text{CH}-\text{Bu}-\text{n} \end{array}$$

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CM 4

CRN 80-62-6 CMF C5 H8 O2

CM 5

CRN 79-41-4 CMF C4 H6 O2

CM 6

CRN 79-10-7 CMF C3 H4 O2

RN 213921-80-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenyl acetate, 2-ethylhexyl 2-propenoate, (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] di-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

$$\begin{array}{c} {\rm O} \\ \parallel \\ {\rm H_2C} = {\rm CH-C-O-CH_2-CH_2-O-CH_2-CH_2-O-CH_2-CH_2-O-C-CH} \end{array}$$

$$3 (D1-Me)$$

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 108-05-4 CMF C4 H6 O2

$$Aco-CH=CH_2$$

CM 4

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \text{CH}_2-\text{O-CH-CH-CH}_2\\ \text{CH}_2-\text{O-C-CH-CH-CH}_2\\ \text{Et-CH-Bu-n} \end{array}$$

CM 5

CRN 79-41-4 CMF C4 H6 O2

```
CM
          6
     CRN 79-10-7
     CMF C3 H4 O2
HO-C-CH=CH2
IC
     ICM C09J133-08
     ICS C09J133-02
INCL 525330200
CC
     38-3 (Plastics Fabrication and Uses)
     acrylate polymer pressure sensitive
     adhesive; surfactant emulsion polymer
     pressure sensitive adhesive
IT
     Polysiloxanes, uses
     RL: IMF (Industrial manufacture); POF (Polymer in formulation);
     TEM (Technical or engineered material use); PREP (Preparation);
     USES (Uses)
        (acrylates, polymers with acrylates; pressure-
        sensitive adhesives for marking films)
ΙT
     Surfactants
        (pressure-sensitive adhesives for
       marking films)
IT
     Adhesives
        (pressure-sensitive; pressure-
        sensitive adhesives for marking films)
ΙT
     79-10-7DP, Acrylic Acid, polymers with
     acrylates and silicone acrylates 79-41-4DP, Methacrylic
     Acid, polymers with acrylates and silicone acrylates
     80-62-6DP, Methyl Methacrylate, polymers with acrylates and
     silicone acrylates 100-42-5DP, Styrene, polymers with acrylates
     and silicone acrylates 103-11-7DP, 2-Ethyl Hexyl Acrylate,
     polymers with acrylates and silicone acrylates
                                                     141-32-2DP, Butyl
     Acrylate, polymers with acrylates and silicone acrylates
     148446-50-8P, Acrylic Acid-Butyl
     Acrylate-2-EthylHexyl Acrylate-Methacrylic Acid
     -Methyl Methacrylate-Styrene copolymer 213921-80-3P,
     Acrylic Acid-Butyl Acrylate-2-Ethylhexyl
    Acrylate-Methacrylic Acid-Tripropylene glycol
     diacrylate-Vinyl Acetate copolymer
    RL: IMF (Industrial manufacture); POF (Polymer in formulation);
     TEM (Technical or engineered material use); PREP (Preparation);
    USES (Uses)
        (pressure-sensitive adhesives for
       marking films)
IT
    577-11-7, Aerosol OT-75
                               9004-82-4, Disponil FES 77
     RL: MOA (Modifier or additive use); USES (Uses)
        (pressure-sensitive adhesives for
       marking films)
REFERENCE COUNT:
                               THERE ARE 22 CITED REFERENCES AVAILABLE
                         22
                               FOR THIS RECORD. ALL CITATIONS AVAILABLE
                               IN THE RE FORMAT
L227 ANSWER 30 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                        2000:622656 HCAPLUS <<LOGINID::20060124>>
DOCUMENT NUMBER:
                        133:282594
TITLE:
                        Study on acrylic hot melt pressure
```

```
sensitive adhesive
AUTHOR(S):
                         Ren, Jia-Xiang; Du, Yi; Li, Jiang-Ping; Pan,
                         Zhi-Chun; Liu, De-Shan; Zhou, Qi-Xiang
                         Department of Chemical Engineering, Tsinghua
CORPORATE SOURCE:
                         University, Beijing, 100084, Peop. Rep. China
SOURCE:
                         Gaofenzi Cailiao Kexue Yu Gongcheng (2000),
                         16(4), 139-142
                         CODEN: GCKGEI; ISSN: 1000-7555
PUBLISHER:
                         Gaofenzi Cailiao Kexue Yu Gongcheng Bianjibu
DOCUMENT. TYPE:
                         Journal
LANGUAGE:
                         Chinese
     Acrylic hot melt pressure-sensitive adhesive
     composed of acrylic copolymer and ionic crosslinking agent was
     synthesized by means of bulk polymerization The synthesized copolymer
     was made of three components: soft monomer: Bu
     acrylate and 2-Et hexyl acrylate; hard monomer
     : Me methacrylate, Me acrylate, vinyl acetate or styrene;
     functional monomer: acrylic acid, maleic
     anhydride and acrylamide. The synthesis discipline of the acrylic
     copolymer and the influences of copolymer component on the melting
     viscosity, 180° peel strength, tack and holding power of
     the pressure-sensitive adhesive were
     discussed. The pressure-sensitive adhesive
     with excellent properties was obtained, which could be used in the
     preparation of tape easily.
CC
     38-3 (Plastics Fabrication and Uses)
ST
     acrylic hot melt pressure sensitive adhesive
     prepn
IT
     Adhesives
        (hot-melt, pressure-sensitive; preparation and properties
        of acrylic hot melt pressure sensitive
        adhesive)
IT
     Adhesion, physical
     Polymerization
     Viscosity
        (preparation and properties of acrylic hot melt pressure
        sensitive adhesive)
IT
     300348-81-6P, Acrylamide-acrylic acid-butyl acrylate-2-ethylhexyl
     acrylate-maleic anhydride-methyl acrylate-methyl
     methacrylate-vinyl acetate copolymer
                                            300348-82-7P,
     Acrylamide-acrylic acid-butyl acrylate-2-ethylhexyl
     acrylate-maleic anhydride-methyl acrylate-vinyl acetate copolymer
     300348-83-8P, Acrylamide-acrylic acid-butyl acrylate-2-ethylhexyl
     acrylate-maleic anhydride-methyl methacrylate-vinyl acetate
                300348-84-9P, Acrylamide-acrylic acid-butyl
     acrylate-2-ethylhexyl acrylate-maleic anhydride-methyl
     acrylate-methyl methacrylate copolymer 300348-85-0P,
     Acrylamide-butyl acrylate-2-ethylhexyl acrylate-maleic
     anhydride-methyl acrylate-methyl methacrylate-vinyl acetate
     copolymer
                 300348-86-1P, Acrylamide-acrylic acid-2-ethylhexyl
     acrylate-maleic anhydride-methyl acrylate-methyl
     methacrylate-vinyl acetate copolymer
     RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical
     or engineered material use); PREP (Preparation); USES (Uses)
        (preparation and properties of acrylic hot melt pressure
        sensitive adhesive)
L227 ANSWER 31 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         2000:193626 HCAPLUS <<LOGINID::20060124>>
DOCUMENT NUMBER:
                         133:136257
TITLE:
                         Analyzing new developments in oligomers for UV
```

curable pressure-sensitive

adhesives Sciangola, Deborah A. AUTHOR (S): CORPORATE SOURCE: ., USA SOURCE: Adhesives Age (2000), 43(2), 25, 27, 29, 31 CODEN: ADHAAO; ISSN: 0001-821X PUBLISHER: Chemical Week Associates DOCUMENT TYPE: Journal LANGUAGE: English A study was made with three urethane diacrylate oligomers with Tg -30 to -38° and epoxy specialty oligomers with Tg -74° and 13°, and in one variation, two different C-9 hydrocarbon resins were studied: one with a ring and ball softening point of 115° and the other with softening point of 135°. Other components used were ethoxyethoxyethyl acrylate monomer, UV catalyst, emulsifying monomer (ethoxylated nonylphenol acrylate) and stabilizers. Peel strengths was achieved comparable to com. available water- and solvent-based general purpose permanent acrylic PSA, and it is also possible to determine what is needed in a UV-curable PSA to achieve good tack and shear adhesive failure temperature It is also possible to apply a liquid PSA without necessity to heat it to evaporate solvent or water, and the adhesives would be 100% solids, so the cast thickness should be similar to the final thickness. CC 38-3 (Plastics Fabrication and Uses) ST urethane acrylate photocurable pressure sensitive adhesive; epoxy acrylate photocurable pressure sensitive adhesive Polyurethanes, uses ΙT RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses) (acrylates, oligomeric; analyzing new developments in oligomers for UV curable pressure-sensitive adhesives IT Epoxy resins, uses RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses) (acrylates; analyzing new developments in oligomers for UV curable pressure-sensitive adhesives) IT Adhesives (photocurable, pressure-sensitive; analyzing new developments in oligomers for UV curable pressure -sensitive adhesives) TΤ 7328-17-8 50974-47-5, Polyethylene glycol nonylphenyl ether acrylate RL: MOA (Modifier or additive use); USES (Uses) (analyzing new developments in oligomers for UV curable pressure-sensitive adhesives) REFERENCE COUNT: THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L227 ANSWER 32 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: DOCUMENT NUMBER: 131:272855 TITLE: Thermoplastic resin composition for heat-sensitive adhesive INVENTOR(S): Mizumoto, Kiyoharu; Takahashi, Ikuo; Nakanishi, Kazuhiro; Ohmori, Yasuhiro; Tanabiki, Fumio; Nagasawa, Masakatsu; Inokami,

Kiyotaka; Ohshima, Hiroyuki; Miki, Teruhiko; Takemoto, Shin; Kudo, Masataka; Baba, Tsuneo;

Idehara, Kenji

PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan; et

al.

PCT Int. Appl., 309 pp. CODEN: PIXXD2 SOURCE:

DOCUMENT TYPE: LANGUAGE:

Patent

FAMILY ACC. NUM. COUNT: 1

Japanese

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9950356	A1	19991007	WO 1999-JP1613	1999
W: US RW: BE, DE, FR,	GB, IT			0330
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R: BE, DE, FR, JP 2000053874	A2	20000222	JP 1999-92678	1999

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			JP 1998-109492	A	1998 0420
			JP 1998-109495	A	1998 0420
			JP 1998-110733	A	1998 0421
			JP 1998-276446	A	1998 0910
			JP 1998-274087	A	1998 0928
			JP 1998-274088	A	1998 0928
			JP 1998-274089	A	1998 0928
			JP 1998-303722	A	1998 1026
			JP 1998-303723	A	1998 1026
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OTHER SOURCE(S): MARPAT 131:272855

A thermoplastic composition, useful for heat-sensitive pressure-sensitive adhesive with excellent blocking resistance, contains ≥1 solid plasticizers including (A) esters of ≥3 alkyl-substituted cyclohexene ring alc. or crosslinked six-member ring alc. with polybasic acid, and (B) phosphorus compds. having a m.p. 55-100°, and (C) diesters of (alkyl substituted) hydroquinone, resorcinol, or catechol with organic monobasic acid. Thus, bis(cis-3,3,5-trimethylcyclohexyl) phthalate was synthesized from cis-3,3,5-trimethylcyclohexanol and phthalic anhydride, 100 parts of which was mixed with anionic surfactant polyacarboxylic acid ammonium salt 15 and water 80 parts to give a solid plasticizer water dispersion, 100 parts of which was then mixed with 26 parts of 2-ethylhexyl acrylate/MMA/acrylic acid copolymer 28 parts, tackifier terpene resin 17 parts to form a heat-sensitive adhesive, showing adhesion strength 1150 gf/25 mm, block resistance 5 (5 best 1 worst). 245652-94-2P, Methyl methacrylate-butyl acrylateacrylic acid-styrene-2-ethylhexyl acrylate-Blemmer PE 200 graft copolymer 245652-95-3P, Methyl methacrylate-glycidyl methacrylate-butyl acrylateacrylic acid-styrene-2-ethylhexyl acrylate-Blemmer PE 200 graft copolymer 245652-96-4P, Methyl methacrylate-2-methylglycidyl methacrylate-butyl acrylateacrylic acid-styrene-2-ethylhexyl acrylate-Blemmer PE 200 graft copolymer 245652-97-5P, Methyl methacrylate-3,4-epoxycyclohexyl methacrylate-butyl acrylate-acrylic acid-styrene-2-ethylhexyl

acrylate-Blemmer PE 200 graft copolymer 245652-97-5P,
Methyl methacrylate-3,4-epoxycyclohexyl methacrylate-butyl
acrylate-acrylic acid-styrene-2-ethylhexyl
acrylate-Blemmer PE 200 graft copolymer 245652-98-6P,
Methyl methacrylate-3-chloro-2-hydroxypropyl methacrylate-butyl
acrylate-acrylic acid-styrene-2-ethylhexyl
acrylate-Blemmer PE 200 graft copolymer 245652-99-7P,
Methyl methacrylate-butyl acrylate-acrylic acid
-styrene-Blemmer PE 200 graft copolymer 245653-00-3P,
Butyl acrylate-acrylic acid
-styrene-2-ethylhexyl acrylate-Blemmer PE 200 graft copolymer
245653-01-4P, Methyl methacrylate-acrylic

acid-styrene-2-ethylhexyl acrylate-Blemmer PE 200 graft copolymer

PL: POF (Polymer in formulation): PPP (Properties): SPN (Styrenson)

RL: POF (Polymer in formulation); PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP

(Preparation); USES (Uses)
 (core-shell; thermoplastic resin composition for heat-sensitive
 adhesive)
245652-94-2 HCAPLUS
2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl

2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, ethenylbenzene, 2-ethylhexyl 2-propenoate, α -(2-methyl-1-oxo-2-propenyl)- ω -hydroxypoly(oxy-1,2-ethanediyl) and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

CM 1

RN

CN

CRN 25736-86-1 CMF (C2 H4 O)n C4 H6 O2 CCI PMS

$$H_2C$$
 O H_2C O H_2C H_2C O H_2C O H_2C OH H

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \text{CH}_2-\text{O-C-CH} = \text{CH}_2 \\ \text{CH}_2-\text{O-C-CH} = \text{CH}_2 \\ \text{Et-CH-Bu-n} \end{array}$$

CM 4

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CM 5

CRN 80-62-6

CMF C5 H8 O2

CM 6

CRN 79-10-7 CMF C3 H4 O2

RN 245652-95-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, ethenylbenzene, 2-ethylhexyl 2-propenoate, α-(2-methyl-1-oxo-2-propenyl)-ω-hydroxypoly(oxy-1,2-ethanediyl), oxiranylmethyl 2-methyl-2-propenoate and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

CM 1

CRN 25736-86-1 CMF (C2 H4 O)n C4 H6 O2 CCI PMS

$$H_2C$$
 O \parallel \parallel \parallel OH $Me-C-C$ CH_2-CH_2 0 OH

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 106-91-2 CMF C7 H10 O3

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \text{O} \\ || \\ \text{CH}_2\text{--O-C-CH} = \text{CH}_2 \\ | \\ \text{Et-CH-Bu-n} \end{array}$$

CM 5

CRN 100-42-5 CMF C8 H8

$$H_2C = CH - Ph$$

CM 6

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c|c} ^{H_2C} & \text{O} \\ \parallel & \parallel \\ \text{Me-} \text{C-} \text{C-} \text{OMe} \end{array}$$

CM 7

CRN 79-10-7 CMF C3 H4 O2

RN 245652-96-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, ethenylbenzene, 2-ethylhexyl 2-propenoate, (2-methyloxiranyl)methyl 2-methyl-2-propenoate, α-(2-methyl-1-oxo-2-propenyl)-ω-hydroxypoly(oxy-1,2-ethanediyl) and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

CM 1

CRN 41768-20-1 CMF C8 H12 O3

CM 2

CRN 25736-86-1

CMF (C2 H4 O)n C4 H6 O2 CCI PMS

$$\begin{array}{c|c} {\rm H_2C} & {\rm O} \\ \parallel & \parallel \\ {\rm Me-C-C} & {\rm CH_2-CH_2- \frac{1}{2}} \end{array} \quad {\rm OF}$$

CM 3

CRN 141-32-2 CMF C7 H12 O2

CM 4

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \text{CH}_2-\text{O-C-CH} \longrightarrow \text{CH}_2 \\ \mid \\ \text{Et-CH-Bu-n} \end{array}$$

CM 5

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CRN 80-62-6 CMF C5 H8 O2

$$^{\rm H_2C}_{\parallel}$$
 $^{\rm O}_{\parallel}$ $^{\rm Me-}$ C- C- OMe

CM 7

CRN 79-10-7 CMF C3 H4 O2

RN 245652-97-5 HCAPLUS CN 2-Propenoic acid, 2-r

2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, ethenylbenzene, 2-ethylhexyl 2-propenoate, α -(2-methyl-1-oxo-2-propenyl)- ω -hydroxypoly(oxy-1,2-ethanediyl), 7-oxabicyclo[4.1.0]hept-3-yl 2-methyl-2-propenoate and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

CM 1

CRN 125566-99-6 CMF C10 H14 O3

CM 2

CRN 25736-86-1 CMF (C2 H4 O)n C4 H6 O2 CCI PMS

$$H_2$$
C O H_2 C H_2 C H_2 C H_3 C H_4 C H_4 C H_4 C H_5 C

CM 3

CRN 141-32-2

CMF C7 H12 O2

CM 4

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{CH}_2\text{--O-C-CH} \end{array} \text{CH}_2 \\ \parallel \\ \text{Et-CH-Bu-n} \end{array}$$

CM 5

CRN 100-42-5 CMF C8 H8

$${\tt H_2C} = {\tt CH-Ph}$$

CM 6

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c|c} ^{H_2C} & \text{O} \\ \parallel & \parallel \\ \text{Me-} & \text{C-} & \text{C-} & \text{OMe} \end{array}$$

CM 7

CRN 79-10-7 CMF C3 H4 O2

RN 245652-98-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-chloro-2-hydroxypropyl ester, polymer with butyl 2-propenoate, ethenylbenzene, 2-ethylhexyl 2-propenoate, methyl 2-methyl-2-propenoate, α -(2-methyl-1-oxo-2-propenyl)- ω -hydroxypoly(oxy-1,2-ethanediyl) and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

CRN 25736-86-1

CMF (C2 H4 O)n C4 H6 O2 CCI PMS

CM 2

CRN 13159-52-9 CMF C7 H11 Cl O3

$$\begin{array}{c|cccc} \text{OH} & \text{O} & \text{CH}_2 \\ & & \parallel & \parallel \\ \text{ClCH}_2-\text{CH}-\text{CH}_2-\text{O}-\text{C}-\text{C}-\text{Me} \end{array}$$

CM 3

CRN 141-32-2 CMF C7 H12 O2

CM 4

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \text{O} \\ || \\ \text{CH}_2\text{--O-C-CH} \\ || \\ \text{Et-CH-Bu-n} \end{array}$$

CM 5

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CRN 80-62-6 CMF C5 H8 O2

CM 7

CRN 79-10-7 CMF C3 H4 O2

RN 245652-99-7 HCAPLUS

2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, ethenylbenzene, α -(2-methyl-1-oxo-2-propenyl)- ω -hydroxypoly(oxy-1,2-ethanediyl) and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

CM :

CRN 25736-86-1

CMF (C2 H4 O)n C4 H6 O2

CCI PMS

$$\begin{array}{c|c} {\rm H_2C} & {\rm O} \\ \parallel & \parallel \\ {\rm Me-C-C} & -{\rm CH_2-CH_2-} \\ \end{array} \\ \begin{array}{c} {\rm OP} \\ {\rm OP} \\ \end{array}$$

CM 2

CRN 141-32-2 CMF C7 H12 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{n-BuO-C-CH------} \text{CH}_2 \end{array}$$

CM 3

CRN 100-42-5 CMF C8 H8 $H_2C == CH - Ph$

CM 4

CRN 80-62-6 CMF C5 H8 O2

CM 5

CRN 79-10-7 CMF C3 H4 O2

RN 245653-00-3 HCAPLUS

2-Propenoic acid, polymer with butyl 2-propenoate, ethenylbenzene, 2-ethylhexyl 2-propenoate and α-(2-methyl-1-oxo-2-propenyl)-ω-hydroxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

CM 1

CRN 25736-86-1 CMF (C2 H4 O)n C4 H6 O2 CCI PMS

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 103-11-7

CMF C11 H20 O2

$$\begin{array}{c} \text{CH}_2-\text{O-C-CH} \longrightarrow \text{CH}_2 \\ \text{CH}_2-\text{O-C-CH} \longrightarrow \text{CH}_2 \\ \text{Et-CH-Bu-n} \end{array}$$

CM 4

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CM 5

CRN 79-10-7 CMF C3 H4 O2

RN 245653-01-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenylbenzene, 2-ethylhexyl 2-propenoate, α-(2-methyl-1-oxo-2-propenyl)-ω-hydroxypoly(oxy-1,2-ethanediyl) and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

CM 1

CRN 25736-86-1 CMF (C2 H4 O)n C4 H6 O2 CCI PMS

$$\begin{array}{c|c} ^{H_2C} & \text{O} \\ \parallel & \parallel \\ \text{Me} - \text{C} - \text{C} & - \text{O} - \text{CH}_2 - \text{CH}_2 - \frac{1}{n} \end{array} \text{OH}$$

CM 2

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \text{CH}_2-\text{O-C-CH} \longrightarrow \text{CH}_2 \\ \text{CH}_2-\text{O-C-CH} \longrightarrow \text{CH}_2 \\ \text{Et-CH-Bu-n} \end{array}$$

CRN 100-42-5 CMF C8 H8

 $H_2C == CH - Ph$

CM 4

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{ccc} ^{H_2C} & \text{O} \\ \parallel & \parallel \\ \text{Me-} & \text{C-} & \text{C-} & \text{OMe} \end{array}$$

CM 5

CRN 79-10-7 CMF C3 H4 O2

IT 27306-43-0, Styrene-2-ethylhexyl acrylate-methyl

methacrylate-acrylic acid copolymer

RL: MOA (Modifier or additive use); USES (Uses)
(plasticizer in thermoplastic resin composition for heat-sensitive adhesive)

RN 27306-43-0 HCAPLUS CN 2-Propenoic acid, 2-

2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenylbenzene, 2-ethylhexyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{CH}_2-\text{O-C-CH----} \text{CH}_2 \\ \parallel \\ \text{Et-CH-Bu-n} \end{array}$$

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CM 3

CRN 80-62-6 CMF C5 H8 O2

CM 4

CRN 79-10-7 CMF C3 H4 O2

IT 55935-28-9P, Acrylic acid-butyl acrylate-methyl methacrylate copolymer ammonium salt 69040-23-9P, Methyl methacrylate-butyl acrylate-diethylaminoethyl methacrylate-acrylic acid copolymer 134503-52-9P 245652-90-8P 245652-91-9P, Butyl acrylate-methyl methacrylatepolyethylene glycol monomethacrylate graft copolymer RL: POF (Polymer in formulation); PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (plasticizer in thermoplastic resin composition for heat-sensitive adhesive) 55935-28-9 HCAPLUS RNCN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate and 2-propenoic acid, ammonium salt (9CI) (CA INDEX NAME) CM 1

CRN 26300-51-6

CMF (C7 H12 O2 . C5 H8 O2 . C3 H4 O2)x CCI PMS

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 80-62-6 CMF C5 H8 O2

CM 4

CRN 79-10-7 CMF C3 H4 O2

$$\begin{matrix} \text{O} \\ || \\ \text{HO-C-CH} = \text{CH}_2 \end{matrix}$$

RN 69040-23-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-(diethylamino)ethyl ester, polymer with butyl 2-propenoate, methyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

CM 2

CRN 105-16-8 CMF C10 H19 N O2

CRN 80-62-6 CMF C5 H8 O2

CM 4

CRN 79-10-7 CMF C3 H4 O2

RN 134503-52-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, 2-propenoic acid and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 102291-42-9

CMF (C10 H20 O5 Si . C7 H12 O2 . C5 H8 O2 . C3 H4 O2)x CCI PMS

CM 2

CRN 2530-85-0 CMF C10 H20 O5 Si

CM 3

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{ccc} ^{\text{H}_2\text{C}} & \text{O} \\ & || & || \\ \text{Me-C-C-OMe} \end{array}$$

CM 5

CRN 79-10-7 CMF C3 H4 O2

CN

RN 245652-90-8 HCAPLUS

2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, ethenylbenzene, 2-propenoic acid and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 96926-71-5

CMF (C10 H20 O5 Si . C8 H8 . C7 H12 O2 . C5 H8 O2 . C3 H4 O2)x CCI $\,$ PMS

CM 2

CRN 2530-85-0 CMF C10 H20 O5 Si

$$\begin{array}{c|ccccc} {\rm H_2C} & {\rm O} & {\rm OMe} \\ || & || & || \\ {\rm Me-C-C-C-O-(CH_2)_3-Si-OMe} \\ & & | \\ & {\rm OMe} \end{array}$$

CM 3

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CM 5

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c|c} ^{H_2C} & \text{O} \\ \parallel & \parallel \\ \text{Me-} & \text{C-} & \text{C-} & \text{OMe} \end{array}$$

CM 6

CRN 79-10-7 CMF C3 H4 O2

CN

RN 245652-91-9 HCAPLUS

2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate and α -(2-methyl-1-oxo-2-propenyl)- ω -hydroxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

CM 1

CRN 25736-86-1

CMF (C2 H4 O)n C4 H6 O2

CCI PMS

$$\begin{array}{c|c} {\rm H_2C} & {\rm O} \\ \parallel & \parallel \\ {\rm Me-C-C} & - {\rm CH_2-CH_2-} \\ \end{array} \begin{array}{c} {\rm OH} \\ {\rm OH} \end{array}$$

CM 2

CRN 80-62-6 CMF C5 H8 O2

26300-51-6, Methyl methacrylate-butyl acrylate-

acrylic acid copolymer

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical

or engineered material use); USES (Uses)

(plasticizer in thermoplastic resin composition for heat-sensitive adhesive)

26300-51-6 HCAPLUS RN

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

CM 2

CRN 80-62-6 CMF C5 H8 O2

CM 3

CRN 79-10-7 CMF C3 H4 O2

IT 245652-92-0P 245652-93-1P

RL: POF (Polymer in formulation); PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(thermoplastic resin composition for heat-sensitive adhesive)

RN 245652-92-0 HCAPLUS

2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, $\alpha\text{-}[\text{dimethyl}\{3\text{-}[(2\text{-methyl-}1\text{-}\text{oxo-}2\text{-}\text{propenyl})\text{oxy}]\text{propyl}]\text{silyl}]-$\omega\text{-}[(\text{trimethylsilyl})\text{oxy}]\text{poly}[\text{oxy}(\text{dimethylsilylene})], 2-propenoic acid and 3-(trimethoxysilyl)\text{propyl 2-methyl-}2-propenoate, graft (9CI) (CA INDEX NAME)$

CM 1

CN

CRN 123109-42-2

CMF (C2 H6 O Si)n C12 H26 O3 Si2

CCI PMS

CM 2

CRN 2530-85-0 CMF C10 H20 O5 Si

$$^{\mathrm{H_2C}}$$
 O OMe $^{\mathrm{OMe}}$ $^{\mathrm{Me}}$ $^{\mathrm{Me}}$ $^{\mathrm{C}}$ $^$

CM 3

CRN 141-32-2 CMF C7 H12 O2

CM 4

CRN 80-62-6

CMF C5 H8 O2

CM 5

CRN 79-10-7 CMF C3 H4 O2

RN 245652-93-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with α -[dimethyl[3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl]silyl]- ω -[(trimethylsilyl)oxy]poly[oxy(dimethylsilylene)],

2-propenoic acid and 3-(trimethoxysilyl)propyl

2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 123109-42-2

CMF (C2 H6 O Si)n C12 H26 O3 Si2

CCI PMS

CM 2

CRN 2530-85-0 CMF C10 H20 O5 Si

CM 3

CRN 80-62-6 CMF C5 H8 O2

CRN 79-10-7 CMF C3 H4 O2

IT 25085-19-2, Styrene-2-ethylhexyl acrylate-acrylic acid copolymer 25085-39-6, Styrene-butadiene-acrylic acid copolymer 30705-21-6, 2-Ethylhexyl acrylate-methyl methacrylate-acrylic acid copolymer

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(thermoplastic resin composition for heat-sensitive adhesive)

RN 25085-19-2 HCAPLUS

2-Propenoic acid, polymer with ethenylbenzene and 2-ethylhexyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CN

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \circ \\ \parallel \\ \mathsf{CH}_2-\mathsf{O}-\mathsf{C}-\mathsf{CH} \Longrightarrow \mathsf{CH}_2 \\ \mid \\ \mathsf{Et}-\mathsf{CH}-\mathsf{Bu}-\mathsf{n} \end{array}$$

CM 2

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CM 3

CRN 79-10-7 CMF C3 H4 O2

RN 25085-39-6 HCAPLUS

CN 2-Propenoic acid, polymer with 1,3-butadiene and ethenylbenzene
(9CI) (CA INDEX NAME)

CM 1

CRN 106-99-0 CMF C4 H6

 $H_2C = CH - CH = CH_2$

CM 2

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CM 3

CRN 79-10-7 CMF C3 H4 O2

RN 30705-21-6 HCAPLUS CN 2-Propenoic acid, 2-

7 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-ethylhexyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \text{CH}_2-\text{O-C-CH} \longrightarrow \text{CH}_2 \\ \mid \\ \text{Et-CH-Bu-n} \end{array}$$

CM 2

CMF C5 H8 O2 0 Me-C-C-OMe CM 3 CRN 79-10-7 CMF C3 H4 O2 но- с- сн сн сн г IC ICM C08L101-00 ICS C08L057-06; C08K005-49; C08K005-10; C08K003-36; C09J201-00; C09J007-02; B41M001-30; B41M005-00; C08F246-00; C08F230-08; C08F265-00; C08F291-10 CC 38-3 (Plastics Fabrication and Uses) TT 245652-94-2P, Methyl methacrylate-butyl acrylateacrylic acid-styrene-2-ethylhexyl acrylate-Blemmer PE 200 graft copolymer 245652-95-3P, Methyl methacrylate-glycidyl methacrylate-butyl acrylateacrylic acid-styrene-2-ethylhexyl acrylate-Blemmer PE 200 graft copolymer 245652-96-4P, Methyl methacrylate-2-methylglycidyl methacrylate-butyl acrylateacrylic acid-styrene-2-ethylhexyl acrylate-Blemmer PE 200 graft copolymer 245652-97-5P, Methyl methacrylate-3,4-epoxycyclohexyl methacrylate-butyl acrylate-acrylic acid-styrene-2-ethylhexyl acrylate-Blemmer PE 200 graft copolymer 245652-98-6P, Methyl methacrylate-3-chloro-2-hydroxypropyl methacrylate-butyl acrylate-acrylic acid-styrene-2-ethylhexyl acrylate-Blemmer PE 200 graft copolymer 245652-99-7P, Methyl methacrylate-butyl acrylate-acrylic acid -styrene-Blemmer PE 200 graft copolymer 245653-00-3P, Butyl acrylate-acrylic acid -styrene-2-ethylhexyl acrylate-Blemmer PE 200 graft copolymer 245653-01-4P, Methyl methacrylate-acrylic acid-styrene-2-ethylhexyl acrylate-Blemmer PE 200 graft copolymer RL: POF (Polymer in formulation); PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (core-shell; thermoplastic resin composition for heat-sensitive TT 84-61-7, Dicyclohexyl phthalate 7479-28-9, Trimethylhydroquinone 21300-75-4, Dibornyl phthalate 27306-43-0, diacetate Styrene-2-ethylhexyl acrylate-methyl methacrylate-acrylic acid copolymer 41026-16-8 94058-59-0 139189-30-3 245652-89-5 245652-87-3 245652-88-4 RL: MOA (Modifier or additive use); USES (Uses) (plasticizer in thermoplastic resin composition for heat-sensitive adhesive)

CRN 80-62-6

IT

55935-28-9P, Acrylic acid-butyl

Sastri 10/774,617

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acrylate-methyl methacrylate copolymer ammonium salt
     69040-23-9P, Methyl methacrylate-butyl
     acrylate-diethylaminoethyl methacrylate-acrylic
     acid copolymer 134503-52-9P 245652-90-8P
     245652-91-9P, Butyl acrylate-methyl methacrylate-
     polyethylene glycol monomethacrylate graft copolymer
     RL: POF (Polymer in formulation); PRP (Properties); SPN (Synthetic
     preparation); TEM (Technical or engineered material use); PREP
     (Preparation); USES (Uses)
        (plasticizer in thermoplastic resin composition for heat-sensitive
        adhesive)
     25068-38-6, Epikote 828 26300-51-6, Methyl
IT
     methacrylate-butyl acrylate-acrylic acid
     copolymer
     RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical
     or engineered material use); USES (Uses)
        (plasticizer in thermoplastic resin composition for heat-sensitive
        adhesive)
IT
     245652-92-0P 245652-93-1P
     RL: POF (Polymer in formulation); PRP (Properties); SPN (Synthetic
     preparation); TEM (Technical or engineered material use); PREP
     (Preparation); USES (Uses)
        (thermoplastic resin composition for heat-sensitive adhesive)
     25085-19-2, Styrene-2-ethylhexyl acrylate-acrylic
IT
     acid copolymer 25085-39-6, Styrene-butadiene-
     acrylic acid copolymer 30705-21-6,
     2-Ethylhexyl acrylate-methyl methacrylate-acrylic
     acid copolymer
     RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical
     or engineered material use); USES (Uses)
        (thermoplastic resin composition for heat-sensitive adhesive)
REFERENCE COUNT:
                        12
                              THERE ARE 12 CITED REFERENCES AVAILABLE
                              FOR THIS RECORD. ALL CITATIONS AVAILABLE
                              IN THE RE FORMAT
L227 ANSWER 33 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN
                      1999:440043 HCAPLUS <<LOGINID::20060124>>
ACCESSION NUMBER:
DOCUMENT NUMBER:
                        131:75075
TITLE:
                        Smear-resistant pigmented ink jet inks
                        containing beta-diketone or ureido dispersants
INVENTOR(S):
                        Page, Loretta Ann Grezzo; Ma, Sheau-Hwa;
                        Simms, John A.
PATENT ASSIGNEE(S):
                        E. I. Du Pont de Nemours & Co., USA
SOURCE:
                        Eur. Pat. Appl., 12 pp.
                        CODEN: EPXXDW
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
                               DATE
     PATENT NO.
                        KIND
                                           APPLICATION NO.
                                                                  DATE
     -----
                        ----
                               -----
                                           ______
    EP 927751
                        A1
                               19990707 EP 1998-124302
                                                                  1998
                                                                  1221
     EP 927751
                         B1
                               20020911
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
            MC, PT, IE, SI, LT, LV, FI, RO
     US 6037390
                         Α
                               20000314
                                           US 1997-2066
                                                                  1997
                                                                  1231
```

JP 11269417 A2 19991005 JP 1998-377710

1998 1229

PRIORITY APPLN. INFO.:

US 1997-2066

1997 1231

AB An ink jet ink composition is provided which contains an aqueous vehicle; a colorant; and a polymeric dispersant comprising 2 to 50% of monomers selected from $\beta\text{-diketone}$ containing monomers and ureido monomers, as well as a combination of such ink with a media having basic groups such as primary or secondary amines and divalent cations.

IT 229020-08-0P, Acetoacetoxyethyl methacrylate
-ethoxytriethylene glycol methacrylate-methacrylic acid
copolymer
RL: IMF (Industrial manufacture); RCT (Reactant); PREP

(Preparation); RACT (Reactant or reagent)
 (smear-resistant pigmented ink jet inks containing beta-diketone or
 ureido dispersants)

RN 229020-08-0 HCAPLUS

CN Butanoic acid, 3-oxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2-[2-(2-ethoxyethoxy)ethoxy]ethyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 39670-09-2 CMF C12 H22 O5

CM 2

CRN 21282-97-3 CMF C10 H14 O5

CM 3

CRN 79-41-4 CMF C4 H6 O2

$$\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me- C- CO}_2\text{H} \end{array}$$

IT 229020-10-4P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(smear-resistant pigmented ink jet inks containing beta-diketone or ureido dispersants)

RN 229020-10-4 HCAPLUS

2-Propenoic acid, 2-methyl-, 2-[2-(2-ethoxyethoxy)ethoxy]ethyl ester, polymer with methyl 2-propenoate, 2-(2-oxo-1imidazolidinyl)ethyl 2-methyl-2-propenoate, phenylmethyl 2-methyl-2-propenoate and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

CM 1

CN

CRN 86261-90-7 CMF C9 H14 N2 O3

$$\begin{array}{c|c}
H \\
N \\
O \\
CH_2 - CH_2 - O - C - C - Me
\end{array}$$

CM 2

CRN 39670-09-2 CMF C12 H22 O5

CM

CRN 2495-37-6 CMF C11 H12 O2

CM

CRN 96-33-3 CMF C4 H6 O2

```
5
CM
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CRN 79-10-7 CMF C3 H4 O2

0 но- с- сн= сн2

ICM C09D011-00

CC 42-12 (Coatings, Inks, and Related Products)

229020-08-0P, Acetoacetoxyethyl methacrylate

-ethoxytriethylene glycol methacrylate-methacrylic acid

copolymer

RL: IMF (Industrial manufacture); RCT (Reactant); PREP

(Preparation); RACT (Reactant or reagent)

(smear-resistant pigmented ink jet inks containing beta-diketone or ureido dispersants)

ΙT 229020-10-4P

RL: IMF (Industrial manufacture); TEM (Technical or engineered

material use); PREP (Preparation); USES (Uses)

(smear-resistant pigmented ink jet inks containing beta-diketone or ureido dispersants)

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L227 ANSWER 34 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1999:125789 HCAPLUS <<LOGINID::20060124>>

DOCUMENT NUMBER:

130:183466

TITLE:

Polymer blends for pressure

-sensitive adhesives

INVENTOR(S): PATENT ASSIGNEE(S):

Pahl, Andreas; Roser, Heinz-josef Lohmann G.m.b.H. + Co. K.-G., Germany

SOURCE: Eur. Pat. Appl., 10 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT: 1

	PA	TENT NO.	KIND	DATE	APPLICATION NO.	DATE
	EP	896984	A1	19990217	EP 1998-113436	1998
						0718
	ΕP	896984	B1	20040602		
		R: AT, BE,	CH, DE, I	DK, ES, FR,	GB, GR, IT, LI, LU, N	L, SE,
		MC, PT,	IE, SI, I	LT, LV, FI,	RO	
	DE	19734835	A1	19990218	DE 1997-19734835	
						1997
						0812
	ΑT	268355	E	20040615	AT 1998-113436	
						1998
						0718
	ES	2221099	Т3	20041216	ES 1998-113436	
						1998
						0718
RIO	RIT	Y APPLN. INFO	. :		DE 1997-19734835	A

1997 0812

AB Postcurable adhesives for adhesive tapes are based on blends of ≥1 (meth) acrylate copolymer(s) and poly(glycidyl methacrylate) (I) and/or poly(glycidyl acrylate). The systems have good storage stability and are heat-curable. Thus, an adhesive composition was based on 10:90 acrylic acid-2-ethylhexyl acrylate copolymer 100, I 15, titanium acetylacetonate 0.3, Dyhard 100 S 0.4, and Dyhard UR 200 0.18 part and cured 10 min at 160°; resistance to brake fluid, gasoline, and salt water was demonstrated. 25067-05-4, Poly(glycidyl methacrylate) IT 26374-91-4, Poly(glycidyl acrylate) RL: TEM (Technical or engineered material use); USES (Uses) (blends with (meth)acrylate copolymers; compns. for thermally curable adhesives for adhesive tapes) 25067-05-4 HCAPLUS 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, homopolymer CN (9CI) (CA INDEX NAME)

CM 1

CRN 106-91-2 CMF C7 H10 O3

$$\begin{array}{c|c} \text{O} & \text{O} & \text{CH}_2 \\ & \parallel & \parallel \\ \text{CH}_2\text{-O-C-C-Me} \end{array}$$

RN 26374-91-4 HCAPLUS
CN 2-Propenoic acid, oxiranylmethyl ester, homopolymer (9CI) (CF INDEX NAME)

CM 1

CRN 106-90-1 CMF C6 H8 O3

IT 25134-51-4, Acrylic acid-2-ethylhexyl acrylate
copolymer 26710-97-4, Acrylic acid-butyl
acrylate-2-ethylhexyl acrylate copolymer
119131-43-0, Acrylic acid-isodecyl acrylate
copolymer 220498-68-0, Acrylic acid-isodecyl
acrylate-methyl methacrylate-Norsocryl 104
copolymer
RL: TEM (Technical or engineered material use); USES (Uses)
(blends with glycidyl (meth)acrylate homopolymers;
compns. for thermally curable adhesives for adhesive tapes)
RN 25134-51-4 HCAPLUS
CN 2-Propenoic acid, polymer with 2-ethylhexyl 2-propenoate (9CI)
(CA INDEX NAME)

CM 1

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \circ \\ \parallel \\ \mathsf{CH}_2 - \mathsf{O} - \mathsf{C} - \mathsf{CH} = \mathsf{CH}_2 \\ \mid \\ \mathsf{Et} - \mathsf{CH} - \mathsf{Bu} - \mathsf{n} \end{array}$$

CM 2

CRN 79-10-7 CMF C3 H4 O2

RN 26710-97-4 HCAPLUS
CN 2-Propenoic acid, polymer with butyl 2-propenoate and 2-ethylhexyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

$$\begin{array}{c} \circ \\ \parallel \\ \text{n-BuO-C-CH------} \text{CH}---- \end{array}$$

CM 2

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{CH}_2-\text{O}-\text{C}-\text{CH} \Longrightarrow \text{CH}_2 \\ \parallel \\ \text{Et}-\text{CH}-\text{Bu-n} \end{array}$$

CM 3

CRN 79-10-7 CMF C3 H4 O2

119131-43-0 HCAPLUS RN

2-Propenoic acid, polymer with isodecyl 2-propenoate (9CI) (CA CN INDEX NAME)

CM 1

CRN 1330-61-6 C13 H24 O2 CMF

CCI IDS

$$(iso-C_{10}H_{21}) - o-C-CH = CH_2$$

CM 2

CRN 79-10-7 CMF C3 H4 O2

220498-68-0 HCAPLUS RN

2-Propenoic acid, 2-methyl-, methyl ester, polymer with isodecyl 2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-CNpropenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM

CRN 86261-90-7 CMF C9 H14 N2 O3

$$\begin{array}{c|c} H & O & \\ \hline & N & O & CH_2 \\ \hline & CH_2-CH_2-O-C-C-Me \end{array}$$

CM2

CRN 1330-61-6 C13 H24 O2 CMF CCI IDS

```
(iso-C_{10}H_{21}) - o-C-CH = CH_2
     CM
          3
     CRN 80-62-6
     CMF C5 H8 O2
 H<sub>2</sub>C
      0
Me-C-C-OMe
     CM
     CRN 79-10-7
     CMF C3 H4 O2
HO-C-CH-CH2
TC
     ICM C08L033-06
     ICS C08L033-14; C09J007-02
CC
     38-3 (Plastics Fabrication and Uses)
TT
     Resin acids
     RL: TEM (Technical or engineered material use); USES (Uses)
        (hydrogenated, Me esters, Hercolyn D, blends with (meth)
        acrylate copolymers; compns. for thermally curable
        adhesives for adhesive tapes)
     25067-05-4, Poly(glycidyl methacrylate)
TΤ
     26374-91-4, Poly(glycidyl acrylate)
     181186-44-7, A 140
     RL: TEM (Technical or engineered material use); USES (Uses)
        (blends with (meth)acrylate copolymers; compns. for
        thermally curable adhesives for adhesive tapes)
ΙT
     25134-51-4, Acrylic acid-2-ethylhexyl acrylate
     copolymer 26710-97-4, Acrylic acid-butyl acrylate-2-ethylhexyl acrylate copolymer
     119131-43-0, Acrylic acid-isodecyl acrylate
     copolymer 220498-68-0, Acrylic acid-isodecyl
     acrylate-methyl methacrylate-Norsocryl 104
     copolymer
     RL: TEM (Technical or engineered material use); USES (Uses)
        (blends with glycidyl (meth)acrylate homopolymers;
        compns. for thermally curable adhesives for adhesive tapes)
REFERENCE COUNT:
                                THERE ARE 1 CITED REFERENCES AVAILABLE
                                FOR THIS RECORD. ALL CITATIONS AVAILABLE
                                IN THE RE FORMAT
L227 ANSWER 35 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         1999:12321 HCAPLUS <<LOGINID::20060124>>
DOCUMENT NUMBER:
                          130:82921
TITLE:
                          Graft copolymer with a urea or imide
```

functional group as a pigment dispersant

INVENTOR(S): Huybrechts, Jozef

PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA

SOURCE:

U.S., 10 pp.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT	NO.	KIND	DATE	APPLICATION NO.	DATE
US 585		A		US 1996-733679	1996
CA 234	2240	AA	20000413	CA 1998-2342240	1996 1017
WO 200	00020476	A1	20000413	WO 1998-US21219	1008
	AU, BR, CA,	•		T. T. C. C. C. T.	1008
	MC, NL, PT,	SE		FI, FR, GB, GR, IE,	IT, LU,
.AU 989	17924	AI	20000426	AU 1998-97924	1998 1008
BR 981	.6057	Α	20010612	BR 1998-16057	1998 1008
EP 112	3331	A1	20010816	EP 1998-952158	1998 1008
	BE, DE, FR, 2526614		20020820	JP 2000-574585	1998
PRIORITY AF	PLN. INFO.:			US 1996-733679	1008 A
					1996 1017
				WO 1998-US21219	A 1998 1008

OTHER SOURCE(S): MARPAT 130:82921

PREP (Preparation); USES (Uses)

Les Henderson

An acrylic graft copolymer has weight-average mol. weight ≥1500 and 2-97% polymeric backbone and 2-97% macromonomer side chains attached to the backbone, wherein the graft copolymer has ≥.apprx.1% imide or urea functional dispersing substituents attached to the backbone, the macromonomer, or both the backbone and the macromonomer. Thus, a macromonomer was prepared from 2-ethylhexyl methacrylate, 2-hydroxyethyl methacrylate (I) in the presence of diaquabis (borondifluorodiphenyl-glyoximato) cobaltate II and VAZO 88 initiator, grafted with styrene, Bu acrylate, I, and Plex 6844-0 (25% ethylene urea Et methacrylate in Me methacrylate) to prepare a dispersant. IT 218138-71-7P 218798-73-3P RL: IMF (Industrial manufacture); MOA (Modifier or additive use);

Page 176

571-272-2538

(graft acrylic polymers with urea or imide functional groups as pigment dispersants)

RN 218138-71-7 HCAPLUS

2-Propenoic acid, 2-methyl-, 2-ethylhexyl ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CN

CRN 86261-90-7 CMF C9 H14 N2 O3

CM 2

CRN 868-77-9 CMF C6 H10 O3

CM 3

CRN 688-84-6 CMF C12 H22 O2

$$\begin{array}{c} \text{O} \quad \text{CH}_2 \\ \parallel \quad \parallel \\ \text{CH}_2 - \text{O} - \text{C} - \text{C} - \text{Me} \\ \parallel \\ \text{Et} - \text{CH} - \text{Bu} - \text{n} \end{array}$$

CM 4

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{ccc} ^{H_2C} & \text{O} \\ & \parallel & \parallel \\ \text{Me-} & \text{C-} & \text{C-} & \text{OMe} \end{array}$$

RN 218798-73-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethylhexyl ester, polymer with

butyl 2-propenoate, ethenylbenzene, 2-hydroxyethyl
2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and
2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate, graft (9CI)
 (CA INDEX NAME)

CM 1

CRN 86261-90-7 CMF C9 H14 N2 O3

$$\begin{array}{c|c} H & O & \\ \hline & N & O & CH_2 \\ \hline & & || & || \\ \hline & CH_2-CH_2-O-C-C-Me \\ \end{array}$$

CM 2

CRN 868-77-9 CMF C6 H10 O3

$$^{\rm H_2C}_{\parallel}$$
 $^{\rm O}_{\parallel}$ $^{\rm Me-}$ $^{\rm C-}$ $^{\rm C-}$ $^{\rm O-}$ $^{\rm CH_2-}$ $^{\rm CH_2-}$ $^{\rm OH}$

CM 3

CRN 688-84-6 CMF C12 H22 O2

$$\begin{array}{c} \text{O} \quad \text{CH}_2 \\ || \quad || \\ \text{CH}_2 - \text{O} - \text{C} - \text{C} - \text{Me} \\ || \\ \text{Et} - \text{CH} - \text{Bu-n} \end{array}$$

CM 4

CRN 141-32-2 CMF C7 H12 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{n-BuO-C-CH----} \text{CH}_2 \end{array}$$

CM 5

CRN 100-42-5 CMF C8 H8 H₂C== CH- Ph

CM 6

CRN 80-62-6

CMF C5 H8 O2

IT 27358-84-5P, 2-Hydroxypropyl methacrylate-methyl
 methacrylate copolymer 61604-57-7P, 2-Ethylhexyl
 methacrylate-2-Hydroxyethyl methacrylate
 copolymer 180869-00-5P, 2-Ethylhexyl
 methacrylate-2-Hydroxyethyl methacrylate
 -isobornyl methacrylate copolymer
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP
 (Preparation); RACT (Reactant or reagent)
 (graft acrylic polymers with urea or imide functional groups as pigment dispersants)
RN 27358-84-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-hydroxypropyl ester, polymer with methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1
CRN 923-26-2

CMF C7 H12 O3

CM 2 CRN 80-62-6 CMF C5 H8 O2

RN 61604-57-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-ethylhexyl ester, polymer with
2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 868-77-9

CMF C6 H10 O3

CRN 688-84-6 CMF C12 H22 O2

$$\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{CH}_2 - \text{O} - \text{C} - \text{C} - \text{Me} \\ \parallel & \parallel \\ \text{Et} - \text{CH} - \text{Bu} - \text{n} \end{array}$$

RN 180869-00-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethylhexyl ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 7534-94-3 CMF C14 H22 O2

Relative stereochemistry.

CM 2

CRN 868-77-9 CMF C6 H10 O3

CM 3

CRN 688-84-6 CMF C12 H22 O2

```
CH2-O-C-C-Me
Et-CH-Bu-n
TC
  ICM C08F265-10
INCL 525282000
    42-6 (Coatings, Inks, and Related Products)
    85-41-6DP, Phthalimide, reaction products with graft polymers
    218138-71-7P 218138-72-8DP, reaction products with
    phthalimide 218798-73-3P
    RL: IMF (Industrial manufacture); MOA (Modifier or additive use);
     PREP (Preparation); USES (Uses)
        (graft acrylic polymers with urea or imide functional groups as
       pigment dispersants)
IT
    27358-84-5P, 2-Hydroxypropyl methacrylate-methyl
    methacrylate copolymer 61604-57-7P, 2-Ethylhexyl
    methacrylate-2-Hydroxyethyl methacrylate
    copolymer 180869-00-5P, 2-Ethylhexyl
    methacrylate-2-Hydroxyethyl methacrylate
     -isobornyl methacrylate copolymer
    RL: IMF (Industrial manufacture); RCT (Reactant); PREP
     (Preparation); RACT (Reactant or reagent)
        (graft acrylic polymers with urea or imide functional groups as
       pigment dispersants)
REFERENCE COUNT:
                        18
                              THERE ARE 18 CITED REFERENCES AVAILABLE
                              FOR THIS RECORD. ALL CITATIONS AVAILABLE
                              IN THE RE FORMAT
L227 ANSWER 36 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                     1998:779845 HCAPLUS <<LOGINID::20060124>>
DOCUMENT NUMBER:
                        130:53423
TITLE:
                        Vibration-absorbing, heat-resistant,
                        pressure-sensitive acrylic
                        adhesive composition for use in
                        adhesive tapes
INVENTOR(S):
                        Pahl, Andreas; Domanski, Reinhold
                        Lohmann G.m.b.H. & Co. K.-G., Germany
PATENT ASSIGNEE(S):
SOURCE:
                        Eur. Pat. Appl., 13 pp.
                        CODEN: EPXXDW
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        German
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
    PATENT NO.
                      KIND DATE
                                          APPLICATION NO.
                                                                  DATE
    _____
    EP 881271
                        A1
                               19981202
                                         EP 1998-108230
                                                                  1998
                                                                   0506
                              20030326
    EP 881271
                         B1
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
    DE 19721846
                               19981203 DE 1997-19721846
                         A1
                                                                  1997
                                                                  0526
    AT 235540
                        E 20030415 AT 1998-108230
```

1998

0506 16 A

PRIORITY APPLN. INFO.:

DE 1997-19721846

1997 0526

The title adhesives, which are effective over a wide temperature range, contain (methy)acrylic polymers bearing primary or secondary amino and/or amide groups and bismaleimides as crosslinkers. A mixture of 15:5:80 acrylamide-acrylic acid-2-ethylhexyl acrylate copolymer, 0.1% Ti chelate, and 2% N,N'-m-phenylenebismaleimide was coated (100 g/m2) on a transfer adhesive tape to give a tape with peel adhesion before crosslinking 12, 20, 19, and 21 N/25 mm after 10 min at 160°, 2 h in brake fluid, 2 h in test gasoline, and 2 h in aqueous salt; and 23, 33, 32, and 34, resp., after crosslinking; vs. 12, 16, 15, 16, 19, 18, 14, and 16, resp., with no bismaleimide.

IT 40085-43-6, Acrylamide-acrylic acid-2-ethylhexyl

IT 40085-43-6, Acrylamide-acrylic acid-2-ethylhexyl acrylate copolymer 202581-28-0 217313-61-6, Acrylic acid-2-ethylhexyl acrylate

-N-methylacrylamide copolymer
RL: TEM (Technical or engineered material use); USES (Uses)
 (vibration-absorbing, heat-resistant, pressure
 -sensitive acrylic adhesive composition for use in
 adhesive tapes)

adhesive tapes)
RN 40085-43-6 HCAPLUS

2-Propenoic acid, polymer with 2-ethylhexyl 2-propenoate and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CN

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \text{CH}_2-\text{O-C-CH} \longrightarrow \text{CH}_2 \\ \text{CH}_2-\text{O-C-CH} \longrightarrow \text{CH}_2 \\ \text{Et-CH-Bu-n} \end{array}$$

CM 2

CRN 79-10-7 CMF C3 H4 O2

CM 3

CRN 79-06-1 CMF C3 H5 N O

RN202581-28-0 HCAPLUS

2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-ethylhexyl 2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl CN

2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 86261-90-7 CMF C9 H14 N2 O3

2 CM

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \circ \\ \parallel \\ \mathrm{CH_2-O-C-CH} \end{array}$$

$$= \mathrm{CH_2}$$

$$= \mathrm{Et-CH-Bu-n}$$

CM

CRN 80-62-6 CMF C5 H8 O2

3

$$\begin{array}{c|c} ^{H_2C} & \text{O} \\ & \parallel & \parallel \\ \text{Me-} & \text{C-} & \text{C-} & \text{OMe} \end{array}$$

CM

CRN 79-10-7 CMF C3 H4 O2

```
2-Propenoic acid, polymer with 2-ethylhexyl 2-propenoate and
CN
     N-methyl-2-propenamide (9CI) (CA INDEX NAME)
     CM
         1
     CRN 1187-59-3
     CMF C4 H7 N O
MeNH-C-CH=CH2
     CM
          2
     CRN 103-11-7
     CMF C11 H20 O2
Et-CH-Bu-n
    CM
         3
     CRN 79-10-7
    CMF C3 H4 O2
HO-C-CH-CH2
    ICM C09J004-06
IC
    ICS C09J133-06
CC
    38-3 (Plastics Fabrication and Uses)
ΙT
    Adhesive tapes
    Vibration dampers
        (vibration-absorbing, heat-resistant, pressure
        -sensitive acrylic adhesive composition for use in
       adhesive tapes)
    3006-93-7, N,N'-m-Phenylenebismaleimide 4856-87-5,
IT
    N,N'-Hexamethylenebismaleimide 5132-30-9, N,N'-
    Ethylenebismaleimide
                          79591-36-9 123811-63-2 217458-64-5
    217458-66-7 217458-67-8
    RL: MOA (Modifier or additive use); USES (Uses)
        (crosslinker; vibration-absorbing, heat-resistant,
       pressure-sensitive acrylic adhesive composition
       for use in adhesive tapes)
IT
    13102-25-5, N,N'-(Sulfonyldi-p-phenylene)bismaleimide
    13132-94-0, N,N'-(Oxydi-p-phenylene)bismaleimide
                                                      13676-54-5
     13832-09-2
    RL: MOA (Modifier or additive use); USES (Uses)
```

217313-61-6 HCAPLUS

RN

(vibration-absorbing, heat-resistant, pressure -sensitive acrylic adhesive composition for use in adhesive tapes)

IT 40085-43-6, Acrylamide-acrylic acid-2-ethylhexyl acrylate copolymer 202581-28-0

217313-61-6, Acrylic acid-2-ethylhexyl acrylate

-N-methylacrylamide copolymer

RL: TEM (Technical or engineered material use); USES (Uses) (vibration-absorbing, heat-resistant, pressure

-sensitive acrylic adhesive composition for use in

adhesive tapes)

FOR THIS RECORD. ALL CITATIONS AVAILABLE

THERE ARE 2 CITED REFERENCES AVAILABLE

IN THE RE FORMAT

L227 ANSWER 37 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1998:721523 HCAPLUS <<LOGINID::20060124>>

DOCUMENT NUMBER:

REFERENCE COUNT:

129:344538

TITLE:

Single-phase system based on coreactive latex

INVENTOR(S):

Verge, Christophe; Betremieux, Isabelle

PATENT ASSIGNEE(S):

Elf Atochem S.A., Fr.; ATOFINA

SOURCE:

Eur. Pat. Appl., 13 pp. CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

French

FAMILY ACC. NUM. COUNT: 1

PATENT NO.			APPLICATION NO.	DATE
EP 875541	A1	19981104	EP 1998-401010	1998
				0424
EP 875541	B1	20030910		
R: AT, BE, CH,	DE, DK	, ES, FR,	GB, GR, IT, LI, LU, NL,	SE,
MC, PT, IE,	SI, LT	, LV, FI,	RO	
FR 2762607	A1	19981030	FR 1997-5270	
				1997
				0429
FR 2762607				
JP 10316925	A2	19981202	JP 1998-114632	
				1998
				0424
		19991115		
CN 1204662	Α	19990113	CN 1998-102964	
				1998
				0424
US 6133365	Α	20001017	US 1998-65446	
				1998
				0424
AT 249502	E	20030915	AT 1998-401010	
				1998
				0424
ES 2205401	T3	20040501	ES 1998-401010	
				1998
				0424
CA 2237405	AA	19981029	CA 1998-2237405	
				1998
G3 000 E40 E				0429
CA 2237405	C	20020917		

PRIORITY APPLN. INFO.:

FR 1997-5270

Α 1997

0429

AB The title composition, useful for coatings crosslinkable at low temperature and post-crosslinkable by thermal treatment, comprises a mixture of two dispersions of polymers which are obtained by emulsion polymerization of unsatd. monomers containing NC(:X)NH groups (X = 0, S) and unsatd. monomers bearing (masked) N-alkylol functional groups, resp.

ΙT 26428-44-4P, Ethyl acrylate-N-methylolacrylamide

copolymer 215435-36-2P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(single-phase system based on coreactive latex resins)

RN 26428-44-4 HCAPLUS

CN 2-Propenoic acid, ethyl ester, polymer with N-(hydroxymethyl)-2propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 924-42-5 CMF C4 H7 N O2

$$\begin{array}{c} {\rm O} \\ || \\ {\rm HO-CH_2-NH-C-CH} \end{array}$$

CM 2

CRN 140-88-5 CMF C5 H8 O2

$$\stackrel{\mathsf{O}}{\parallel}$$
 Eto- C- CH--- CH₂

RN 215435-36-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethyl 2-propenoate and 2-(2-oxo-1-imidazolidinyl)ethyl

2-methyl-2-propenoate (9CI) (CA INDEX NAME)

1 CM

CRN 86261-90-7 CMF C9 H14 N2 O3

$$\begin{array}{c} \overset{H}{\overset{N}{\overset{N}{\overset{O}{\overset{CH_2}{\overset{CH_2-CH_2-O-C-C-Me}{\overset{C-M}}{\overset{C-M}}{\overset{C-Me}{\overset{C-Me}{\overset{C-Me}{\overset{C-Me}{\overset{C-Me}{\overset{C-M}}{\overset{C-M}}{\overset{C-M}}{\overset{C-$$

2

CRN 140-88-5 CMF C5 H8 O2

CM 3

CRN 80-62-6 CMF C5 H8 O2

CN

ΙT 215435-38-4P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (single-phase system based on coreactive latex resins)

215435-38-4 HCAPLUS

2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethyl 2-propenoate, N-(hydroxymethyl)-2-propenamide and 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 86261-90-7 CMF C9 H14 N2 O3

$$\begin{picture}(20,10) \put(0,0){\line(1,0){100}} \put(0,0){\line(1,0){1$$

CM 2

CRN 924-42-5 CMF C4 H7 N O2

$$\begin{array}{c} {\rm O} \\ \parallel \\ {\rm HO-CH_2-NH-C-CH=\!\!\!\!-CH_2} \end{array}$$

CRN 140-88-5

CMF C5 H8 O2

```
O
||
EtO- C- CH== CH<sub>2</sub>
```

CM 4

CRN 80-62-6 CMF C5 H8 O2

H₂C 0 || || Me- C- C- OMe

IC ICM C09D005-02

ICS D06M015-29; C08L057-12

ICI C08L057-12, C08L057-12

CC 42-10 (Coatings, Inks, and Related Products)

ST latex unsatd imidazoline copolymer; methylolacrylamide acrylate copolymer latex

IT 26428-44-4P, Ethyl acrylate-N-methylolacrylamide

copolymer 215435-36-2P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP

(Preparation); RACT (Reactant or reagent)

(single-phase system based on coreactive latex resins)

IT 215435-38-4P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(single-phase system based on coreactive latex resins)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE

FOR THIS RECORD. ALL CITATIONS AVAILABLE

IN THE RE FORMAT

L227 ANSWER 38 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:721522 HCAPLUS <<LOGINID::20060124>>

DOCUMENT NUMBER: 129:344537

TITLE: Single-phase system based on coreactive latex

resins

MC, PT, IE, SI, LT, LV, FI, RO

INVENTOR(S): Verge, Christophe; Betremieux, Isabelle

PATENT ASSIGNEE(S): Elf Atochem S.A., Fr. SOURCE: Eur. Pat. Appl., 15 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 875540	A1	19981104	EP 1998-401009	1998
EP 875540	В1	20021113		0424

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,

FR	2762606	A1	19981030	FR	1997-5269		
							1997
							0429
FR	2762606	B1	19990611				
JP	10316927	A2	19981202	JΡ	1998-114631		
							1998
							0424
~-	2977792	B2	19991115				
CN	1204661	A	19990113	CN	1998-102963		
							1998
							0424
US	6107391	A	20000822	US	1998-65443		
							1998
3.00	227750	Е	20021115	3 (1)	1000 401000		0424
AT	227759	E	20021115	AT	1998-401009		1998
							0424
FC	2186106	Т3	20030501	E.C	1998-401009		0424
23	2100100	13	20030301	E3	1990-401009		1998
							0424
CA	2237396	AA	19981029	CA	1998-2237396		0121
	223.030		13301013	U. 1	1330 223.330		1998
							0429
CA	2237396	С	20021008				
PRIORITY	APPLN. INFO.:			FR	1997-5269	Α	
							1997
							0429

AB Coatings which are crosslinkable at ambient temperature and post-crosslinkable by thermal treatment consist of a mixture of two types of particles prepared by aqueous emulsion polymerization of monomers A and B, resp., where A is an unsatd. monomer containing NC(:X)NH groups (X = 0, S) and B is an unsatd. monomer containing (masked) aldehyde groups. A first latex was prepared from Et acrylate and 1-(2-methacryloyloxyethyl)-imidazolin-2-one and a second latex was prepared from N-(2,2-dimethoxy-1-hydroxyethyl)acrylamide and Et acrylate.

IT 215317-49-0P 215435-36-2P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(single-phase system based on coreactive latex resins)

RN 215317-49-0 HCAPLUS

CN 2-Propenoic acid, ethyl ester, polymer with N-(1-hydroxy-2,2-dimethoxyethyl)-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 112642-92-9 CMF C7 H13 N O4

CM 2

CRN 140-88-5 CMF C5 H8 O2 01/25/2006

RN 215435-36-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethyl 2-propenoate and 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 86261-90-7 CMF C9 H14 N2 O3

CM 2

CRN 140-88-5 CMF C5 H8 O2

CM 3

CRN 80-62-6 CMF C5 H8 O2

IT 215317-50-3P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (single-phase system based on coreactive latex resins)

RN 215317-50-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(2-oxo-1-imidazolidinyl)ethyl ester, polymer with ethyl 2-propenoate and N-(1-hydroxy-2,2-dimethoxyethyl)-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 112642-92-9 CMF C7 H13 N O4

CRN 86261-90-7 CMF C9 H14 N2 O3

CM 3

CRN 140-88-5 CMF C5 H8 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{EtO-C-CH----} \text{CH}_2 \end{array}$$

IC ICM C09D005-02

ICS D06M015-356; C08L057-12

ICI C08L057-12, C08L057-04

CC 42-10 (Coatings, Inks, and Related Products)

215317-49-0P 215435-36-2P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP

(Preparation); RACT (Reactant or reagent)

(single-phase system based on coreactive latex resins)

IT 215317-50-3P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(single-phase system based on coreactive latex resins)

L227 ANSWER 39 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 19

DOCUMENT NUMBER: 129:245573

AUTHOR(S):

TITLE:

Homopolymerization studies of new fluorinated

dimethacrylate monomers

CORPORATE SOURCE:

Stansbury, Jeffrey W.; Choi, Kyung M. Polymers Div., Natl. Inst. Standards and Technol., Gaithersburg, MD, 20899, USA

SOURCE:

Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (1998), 39(2),

878-879

CODEN: ACPPAY; ISSN: 0032-3934

PUBLISHER:

American Chemical Society, Division of Polymer

Chemistry

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB A variety of synthetic routes based on alc.-epoxy addition reactions was used to produce a series of dimethacrylate monomers with fluorine contents of 21 % to 51 %. Several monomers include urethane groups to provide hydrogen bonding reinforcement to the polymers. Photopolymn. produced relatively high, and in some cases, extremely high, degrees of methacrylate conversion in these homopolymers compared with dimethacrylates commonly used in dental resins. The water uptake of the fluorinated polymers without urethane groups was very low and decreased with increasing fluorine content. Water sorption in the fluorinated urethane dimethacrylate polymers was greater and varied considerably with the individual monomer structures.

IT 213268-06-5P 213268-10-1P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and characterization of)

RN 213268-06-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, [2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[4,1-phenyleneoxy[1-[(1,1,2,2-tetrafluoroethoxy)methyl]-2,1-ethanediyl]] ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 213267-96-0 CMF C33 H30 F14 O8

PAGE 1-B

- O- CF2- CHF2

RN 213268-10-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,3-phenylenebis[[2,2,2-trifluoro-1 (trifluoromethyl)ethylidene]oxy[2-[[(butylamino)carbonyl]oxy]-3,1 propanediyl]] ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 213268-03-2

CMF C36 H44 F12 N2 O10

35-4 (Chemistry of Synthetic High Polymers)

213268-05-4P 213268-06-5P 213268-07-6P 213268-08-7P

213268-09-8P 213268-10-1P 213268-11-2P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and characterization of)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE

FOR THIS RECORD. ALL CITATIONS AVAILABLE

IN THE RE FORMAT

L227 ANSWER 40 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:147107 HCAPLUS <<LOGINID::20060124>>

DOCUMENT NUMBER: 128:154840

TITLE: Pressure-sensitive adhesive

polymers and adhesives based thereon

INVENTOR(S): Vanhoye, Didier; Lebez, Jean; Melot, Denis;

Wiegert, Cyril

PATENT ASSIGNEE(S): ELF Atochem S.A., Fr.; ATOFINA

SOURCE: Eur. Pat. Appl., 14 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 822206	A1	19980204	EP 1997-401763	1997 0722
EP 822206	B1	20030205		0,22
	DE, DK		GB, GR, IT, LI, LU, NL,	SE,
FR 2751974		19980206	FR 1996-9663	
				1996 0731
FR 2751974	B1	19980918		
AT 232216	E	20030215	AT 1997-401763	
				1997
				0722
ES 2189930	Т3	20030716	ES 1997-401763	
				1997
				0722
CA 2213052	AA	19980131	CA 1997-2213052	
				1997
				0728
TW 460558	В	20011021	TW 1997-86110724	
				1997
110 500000		10000001	VIO 100E 0001E1	0728
US 5908908	Α	19990601	US 1997-903151	1007
				1997 0730
JP 10077454	A2	10080324	JP 1997-220061	0/30
01 100//434	AL	19900324	UF 1331-220001	

					1997 0731
CN 1183446	Α	19980603	CN 1997-118063		
					1997
					0731
CN 1090221	В	20020904			
SG 70604	A1	20000222	SG 1997-2731		
					1997
					0731
PRIORITY APPLN. INFO.:			FR 1996-9663	Α	
					1996
					0731

AB The polymer, with glass-transition temperature (Tg) \leq -25°, results from emulsion copolymn. of (1) ≥1 (meth)acrylic or vinyl monomer the homopolymer of which has Tg ≤-40° 40-95, (2) ≥1 (meth)acrylic or vinyl monomer the homopolymer of which has Tg ≥0° 2-50, (3) (meth)acrylic acid 0.5-6, (4) \geq 1 (meth)acrylic monomer ethoxylated with 1-20 mol ethylene oxide 0-5, (5) \geq 1 (meth)acrylic monomer containing a ureido group 0.05-1, and (6) ≥1 (meth)acrylic monomer containing a sulfo group 0-2 weight%. The adhesive compns. contain ≥40% of such a polymer. Thus, emulsion copolymn. of 2-ethylhexyl acrylate 56, Me acrylate 41.5, acrylic acid 2.5, and ethylimidazolidinone methacrylate 0.5 part with (NH4)2S2O8 in the presence of lauryl mercaptan 0.1, ethoxylated nonylphenol 2.39 and Na lauryl sulfate 0.81 part gave an emulsion (54.8% solids) with average particle size 231 nm and Brookfield viscosity 475 mPa-s at 23°

IT 202581-23-5P 202581-24-6P 202581-25-7P 202581-26-8P 202581-27-9P 202581-28-0P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(pressure-sensitive adhesive polymers)

RN 202581-23-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(2-oxo-1-imidazolidinyl)ethyl ester, polymer with 2-ethylhexyl 2-propenoate, methyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 86261-90-7 CMF C9 H14 N2 O3

CM 2

CRN 103-11-7 CMF C11 H20 O2

CRN 96-33-3 CMF C4 H6 O2

$$\begin{array}{c} \text{O} \\ || \\ \text{MeO-C-CH-----} \text{CH}_2 \end{array}$$

CM

CRN 79-10-7 CMF C3 H4 O2

202581-24-6 HCAPLUS RN

2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-ethylhexyl 2-propenoate, methyl 2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate and CN

2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 86261-90-7 CMF C9 H14 N2 O3

2

CRN 103-11-7 CMF C11 H20 O2

CRN 96-33-3 CMF C4 H6 O2

CRN 80-62-6 CMF C5 H8 O2

CM 5

CRN 79-10-7 CMF C3 H4 O2

RN202581-25-7 HCAPLUS CN

2-Propenoic acid, 2-methyl-, 2-(2-oxo-1-imidazolidinyl)ethyl ester, polymer with 2-ethylhexyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 86261-90-7 CMF C9 H14 N2 O3

$$\begin{picture}(20,10) \put(0,0){\line(1,0){100}} \put(0,0){\line(1,0){1$$

CRN 103-11-7 CMF C11 H20 O2

CM 3

CRN 79-10-7 CMF C3 H4 O2

RN 202581-26-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[2-(2-ethoxyethoxy)ethoxy]ethyl ester, polymer with 2-ethylhexyl 2-propenoate, methyl 2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 86261-90-7 CMF C9 H14 N2 O3

CM 2

CRN 39670-09-2 CMF C12 H22 O5

CM 3

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{CH}_2-\text{O}-\text{C}-\text{CH} \Longrightarrow \text{CH}_2 \\ \parallel \\ \text{Et}-\text{CH}-\text{Bu}-\text{n} \end{array}$$

CM 4

CRN 96-33-3 CMF C4 H6 O2

CM 5

CRN 79-10-7 CMF C3 H4 O2

$$\stackrel{\text{O}}{\parallel}$$
 $_{\text{HO}-\text{ C- CH}}$ $_{\text{CH}_2}$

CN

RN 202581-27-9 HCAPLUS

2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenyl acetate, 2-ethylhexyl 2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate, 2-propenoic acid and sodium ethenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 86261-90-7 CMF C9 H14 N2 O3

$$\begin{picture}(20,10) \put(0,0){\line(1,0){100}} \put(0,0){\line(1,0){1$$

CM 2

CRN 3039-83-6 CMF C2 H4 O3 S . Na $H_2C = CH - SO_3H$

Na

CM 3

CRN 108-05-4 CMF C4 H6 O2

 $Aco-CH=CH_2$

CM4

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \text{CH}_2-\text{O-C-CH} \longrightarrow \text{CH}_2 \\ \text{CH}_2-\text{O-C-CH} \longrightarrow \text{CH}_2 \\ \text{Et-CH-Bu-n} \end{array}$$

CM 5

CRN 80-62-6 CMF C5 H8 O2

CM 6

CRN 79-10-7 CMF C3 H4 O2

$$\begin{matrix} \text{O} \\ || \\ \text{HO-C-CH} = \text{CH}_2 \end{matrix}$$

202581-28-0 HCAPLUS

2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-ethylhexyl 2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME) CN

CM 1 CRN 86261-90-7 CMF C9 H14 N2 O3

$$\begin{picture}(20,0) \put(0,0){\line(1,0){100}} \put(0,0){\line(1,0){10$$

CM 2

CRN 103-11-7 CMF C11 H20 O2

CM 3

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c|c} ^{H_2C} & \text{O} \\ \parallel & \parallel \\ \text{Me-} \text{ C-} \text{ C-} \text{ OMe} \end{array}$$

CM 4

CRN 79-10-7 CMF C3 H4 O2

- IC ICM C08F220-12 ICS C09J133-06
- CC 37-3 (Plastics Manufacture and Processing)

Section cross-reference(s): 38

- ST acrylic emulsion adhesive; pressure sensitive
 adhesive polymer; imidazolidone methacrylic deriv
 copolymer adhesive
- IT Adhesives

(pressure-sensitive; acrylic pressure

-sensitive adhesive polymers)

IT 202581-23-5P 202581-24-6P 202581-25-7P 202581-26-8P 202581-27-9P 202581-28-0P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(pressure-sensitive adhesive polymers)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE

FOR THIS RECORD. ALL CITATIONS AVAILABLE

IN THE RE FORMAT

L227 ANSWER 41 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:389098 HCAPLUS <<LOGINID::20060124>>

DOCUMENT NUMBER: 127:5470

TITLE: Process for the preparation of

alkylimidazolidinone (meth)

acrylates

INVENTOR(S): Riondel, Alain; Paul, Jean-Michel

PATENT ASSIGNEE(S): Elf Atochem S.A., Fr. SOURCE: Eur. Pat. Appl., 8 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 769493			EP 1996-402172	1996
		20020918 , ES, FI,	FR, GB, GR, IE, IT, LI,	1011 LU,
NL, PT, SE FR 2739854	A1	19970418	FR 1995-12150	1995
FR 2739854 AT 224373		19971205 20021015	AT 1996-402172	1017
ES 2181858	Т3	20030301	ES 1996-402172	1996 1011
CN 1153776	A	19970709	CN 1996-121631	1996 1011
CN 1102582	В	20030305		1996 1016
CZ 286583			CZ 1996-3027	1996 1016
CA 2188109	AA	19970418	CA 1996-2188109	1996
CA 2188109 JP 09124607	C A2		JP 1996-295756	1017
		19990405		1996 1017
US 5744613	Α	19980428	US 1996-733266	1996 1017
KR 206530	B1	19990701	KR 1996-46587	1996 1017

PRIORITY APPLN. INFO.: FR 1995-12150

> 1995 1017

OTHER SOURCE(S): MARPAT 127:5470

GI

The compds. I (R1 = H, Me; A, B = C2-5 alkylene) are prepared by reaction of anhydrides and heterocyclic alcs. Methacrylic AΒ anhydride and 1-(2-hydroxyethyl)-imidazolidyl-2-one were esterified in the presence of 2,6-di-tert-butyl-p-cresol and hydroquinone monomethyl ether stabilizers and 1-methylimidazole catalysts to give ethylimidazolidone methacrylate.

ICM C07D233-32 IC

CC 35-2 (Chemistry of Synthetic High Polymers)

alkylimidazolidinone acrylate monomer

; methacrylic anhydride esterification monomer manuf; hydroxyethylimidazolidylone esterification monomer manuf

IT

RL: IMF (Industrial manufacture); PREP (Preparation) (process for the preparation of alkylimidazolidinone (meth)acrylates)

IT 86261-90-7P

RL: IMF (Industrial manufacture); PREP (Preparation) (process for the preparation of alkylimidazolidinone (meth) acrylates)

IT 760-93-0, Methacrylic anhydride 3699-54-5 RL: RCT (Reactant); RACT (Reactant or reagent) (process for the preparation of alkylimidazolidinone (meth)acrylates)

L227 ANSWER 42 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:96670 HCAPLUS <<LOGINID::20060124>>

DOCUMENT NUMBER: 126:105250

TITLE: Laminated adhesive marking films containing

acrylic urethane resin clear covering layers

INVENTOR(S): Tomyama, Takeshi; Maruyama, Tsutomu

Kansai Paint Co Ltd, Japan PATENT ASSIGNEE(S):

SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08302298	A2	19961119	JP 1995-105733	1995

0428 JP 3499961 B2 20040223 PRIORITY APPLN. INFO.: JP 1995-105733 1995 0428

AB Laminated films showing good interlayer adhesion and rapid clear covering film formation comprise successively pressure
-sensitive adhesive layers, PVC film layers, color printing layers, and UV-curable acrylic urethane resin clear covering layers. Thus, a releasing sheet was laminated with a poly(iso-Bu acrylate) adhesive and a PVC sheet, printed with vinyl chloride-vinyl acetate copolymer, dried at room temperature for 2 h, printed with a UV ink (comprising urethane diacrylate 75, Me methacrylate 10, Bu acrylate 10, acetophenone initiator 5, and thioxanthone initiator 4 parts), and irradiated by UV to give a sheet showing good surface appearance, interlayer adhesion, elongation 32%, and water, acid, alkali, and weather resistance.

IC ICM C09J007-02

ICS C09J007-02

CC 38-3 (Plastics Fabrication and Uses)

IT Adhesives

(pressure-sensitive, sheets; laminated adhesive marking films containing UV-curable acrylic urethane resin clear covering layers)

IT Adhesive films

(pressure-sensitive; laminated adhesive
marking films containing UV-curable acrylic urethane resin clear
covering layers)

L227 ANSWER 43 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1996:446491 HCAPLUS <<LOGINID::20060124>>

DOCUMENT NUMBER: 125:114618

TITLE: Process of preparation of

alkylimidazolidone methacrylates

INVENTOR(S): Riondel, Alain; Herbst, Gilles; Levray, Andre

PATENT ASSIGNEE(S): Elf Atochem S.A., Fr. SOURCE: Eur. Pat. Appl., 9 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 712846	A1	19960522	EP 1995-402556	
				1995
				1115
EP 712846	В1	19990811		
			, GR, IE, IT, LI, LU,	NT.
PT. SE	DE, DR	, 65, FR, GD	, GR, 11, 11, 11, 10,	1111,
FR 2727112	A1	19960524	FR 1994-13848	
FR 2/2/112	AI	19960524	FR 1994-13646	1004
				1994
				1118
FR 2727112	B1	19961220		
CA 2162838	AA	19960519	CA 1995-2162838	
				1995
				1114

CA 2162838	С	20010814		
AT 183180	E	19990815	AT 1995-402556	
				1995
				1115
CN 1127750	A	19960731	CN 1995-119631	
				1995
				1117
CN 1052000	В	20000503		
US 5610313	A	19970311	US 1995-544438	
				1995
				1117
KR 153187	B1	19981116	KR 1995-41964	
				1995
				1117
CZ 289028	В6	20011017	CZ 1995-3038	
				1995
				1117
JP 08269016	A2	19961015	JP 1995-325131	
				1995
				1120
JP 2776782	B2	19980716		
PRIORITY APPLN. INFO.:			FR 1994-13848	A
				1994
				1118

OTHER SOURCE(S): GI

MARPAT 125:114618

AB The title compds. I (R1 = H, Me; A, B = C2-C5 hydrocarbyl chain) were prepared by reaction of (meth)acrylates with heterocyclic alcs. in presence of a catalyst consisting of a mixture of a Mg alcoholate and a Ca chelate of a 1,3-dicarbonyl compound or a tin alkoxide, oxide, or diester. E.g., reaction of (hydroxyethyl) imidazolidone and Me methacrylate in presence of (EtO)2Mg and dibutyltin oxide gave 81% ethylimidazolidone methacrylate.

IC

ICM C07D233-32 ICS C07D239-10; C07D243-04; C07D245-02

- CC 28-9 (Heterocyclic Compounds (More Than One Hetero Atom))
- ST alkylimidazolidone methacrylate prepn;

imidazolidone methacrylate prepn

818-08-6 2414-98-4, Diethoxymagnesium 19372-44-2, Calcium acetylacetonate, uses 36915-24-9 56513-90-7 72072-39-0 73592-45-7 118448-18-3 178928-93-3 178928-94-4 178928-95-5 178928-96-6 178928-97-7

RL: CAT (Catalyst use); USES (Uses)

(preparation of alkylimidazolidone methacrylates

IT 80-62-6 3699-54-5

RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of alkylimidazolidone methacrylates

```
IT
    86261-90-7P
    RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation of alkylimidazolidone methacrylates
L227 ANSWER 44 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1995:890013 HCAPLUS <<LOGINID::20060124>>
DOCUMENT NUMBER:
                        123:288260
TITLE:
                        Methacrylate-terminated epoxide-amine
                        prepolymers with water resistance
INVENTOR(S):
                        Tiller, Hans-Juergen; Helbig, Manfred Dr
PATENT ASSIGNEE(S):
                        Germany
                        Ger. Offen., 5 pp.
SOURCE:
                        CODEN: GWXXBX
DOCUMENT TYPE:
                        Patent
                        German
LANGUAGE:
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
                   KIND
                                         APPLICATION NO.
    PATENT NO.
                              DATE
                                                                  DATE
    -----
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                               -----
                                           ------
                               19950427 DE 1993-4336451
    DE 4336451
                       A1
                                                                  1993
                                                                  1026
PRIORITY APPLN. INFO.:
                                          DE 1993-4336451
                                                                  1993
                                                                  1026
    Prepolymers X [NR2 (R3NR2) mCH2CH (OR4) CH2OR1OCH2CH (OR4) CH2] nNR2 (R3NR2
AB
    ) mX (I) and X[OR1OCH2CH(OR4)CH2NR2(R3NR2)mCH2CH(OR4)CH2]nOR1OX [X
    = H2C:CMeCO2CH2CH(OR4)CH2; R1 = divalent hydrocarbyl optionally
    containing F; R2 = F-containing hydrocarbyl; R3 = hydrocarbyl optionally
    containing F; R4 = H, SiMe3, alkylaminocarbonyl; m = 0-1; n = 1-3],
    useful as adhesives, etc., are prepared Reacting 58.75 mmol
    bisphenol A diglycidyl ether with 117.50 mmol 3-
    (trifluoromethyl)aniline and reacting the product with 117.50 mmol
    glycidyl methacrylate gave I [R1 = p-C6H4CMe2-p-C6H4; R2 =
    m-(F3C)C6H4; R4 = H; m = 0; n = 1] which was mixed with a
    urethane dimethacrylate, Me methacrylate, and
    Bz202, placed between sheets of a Ti alloy, and cured at
    80° to give tensile shear adhesion 77.3 MPa initially and
    65.8 MPa after 2 h in boiling water.
IC
    ICM C08G059-17
    ICS C08G059-14; C08L063-10; C08J003-24
ICA C08J005-00; C09J163-10; C09D163-10
    37-6 (Plastics Manufacture and Processing)
    Section cross-reference(s): 35, 38
IT
    Epoxy resins, preparation
    RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical
    or engineered material use); PREP (Preparation); USES (Uses)
        (reaction products with (trifluoromethyl)aniline,
       methacrylate-terminated; preparation and use for
       water-resistant adhesives)
IT
    79-41-4DP, esters with bisphenol A diglycidyl ether-
     (trifluoromethyl)aniline adducts 98-16-8DP, 3-
     (Trifluoromethyl)aniline, reaction products with bisphenol A
    diglycidyl ether, methacrylate esters 106-91-2DP, reaction
    products with bisphenol A diglycidyl ether-
     (trifluoromethyl)aniline adducts 1675-54-3DP, reaction products
    with (trifluoromethyl)aniline, methacrylate
```

esters 169672-97-3P 169672-98-4P 169672-99-5P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (preparation and use for water-resistant adhesives)

L227 ANSWER 45 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1995:671035 HCAPLUS <<LOGINID::20060124>>

DOCUMENT NUMBER:

123:201082

TITLE:

Electron beam curing of dimer acid-based

urethane acrylates for pressure

sensitive adhesives

AUTHOR (S):

SOURCE:

Sasaki, Takashi; Takeda, Satoe; Shiraishi,

Katsutoshi

CORPORATE SOURCE:

Japan Atomic Energy Research Institute, Takasaki Radiation Chemistry Research Establishment, Takasaki, 370-12, Japan JAERI-Conf (1995), 95-003 (Proceedings of the 6th Japan-China Bilateral Symposium on

Radiation Chemistry, 1994), 424-7

CODEN: JECNEC

PUBLISHER:

Japan Atomic Energy Research Institute

DOCUMENT TYPE:

Journal

LANGUAGE: English Polyester urethane diacrylate prepolymers

prepared from dimer acids were cured with low-energy electron beams to investigate adhesive properties of cured films. Among various type monomers added, monofunctional methacrylates such as isobornyl methacrylate (IBX-MA) were effective for higher peel strength cured films although the dose-to-cure for the mixts. increased to 100 kGy or more. The increase in the mol. weight of prepolymers resulted in lower curing rates but higher peel ${\rm c}$ strength. Aging tests up to 80° for four weeks proved good stability in peel strength of the stored products.

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 37

ST polyester polyurethane diacrylate electron beam curing; dimer acid urethane acrylate curing; pressure sensitive adhesive urethane acrylate curing

TT Adhesives

Crosslinking

(electron-beam curing of dimer acid-based urethane acrylates for-pressure sensitive adhesives)

Urethane polymers, uses TT

RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES

(polyester-, acrylates; electron-beam curing of dimer acid-based urethane acrylates for-pressure sensitive adhesives)

79-41-4D, Methacrylic acid, derivs., polyurethanes IT 7534-94-3D, Isobornyl methacrylate, derivs., polyurethanes RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES

> (electron-beam curing of dimer acid-based urethane acrylates for-pressure sensitive adhesives)

L227 ANSWER 46 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1995:478421 HCAPLUS <<LOGINID::20060124>>

DOCUMENT NUMBER: 122:216225

TITLE: A crosslinkable polymer emulsion, a method for making a crosslinked

polymer film, the film produced by the method

and a **crosslinking** agent for carboxy-substituted polymers

INVENTOR(S): Bricker, Mark Charles; Van, Rheenen Paul Ralph

PATENT ASSIGNEE(S): Rohm & Haas Co., USA SOURCE: Eur. Pat. Appl., 17 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 640675	A1	19950301	EP 1994-306221	1994
R: DE, ES, FR,		, IT 19950227	ZA 1994-6506	0823
ZA 9406506	Α .	19950227	ZA 1994-6506	1994 0826
PRIORITY APPLN. INFO.:			US 1993-110532 A	0828
				1993 0823

AB The title emulsion useful for pressure-sensitive adhesives has a pH of 1.5-8.5 and includes a carboxy-substituted latex polymer dispersed in an aqueous medium, and iron(III) compound and an amount of a stabilizer selected from the group consisting of nonionic surfactants and protective colloids effective to sterically stabilize the emulsion. A method for making a crosslinked polymer film includes forming a layer of the emulsion and drying the layer to form the crosslinked polymer film, the film being ionically crosslinked between carboxy substituent groups of the polymer by iron(III) cations. A crosslinking agent for carboxy-substituted polymers includes particles of a water-insol. iron(III) compound having an average maximum characteristic linear dimension of ≤5 μ.

IT 162102-51-4P 162102-52-5P 162102-53-6P 162102-54-7P 162102-55-8P 162102-56-9P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(crosslinkable polymer emulsions for pressure

-sensitive adhesives)

RN 162102-51-4 HCAPLUS

2-Propenoic acid, polymer with butyl 2-propenoate and ethenyl acetate, iron(3+) salt (9CI) (CA INDEX NAME)

CM 1

CN

CRN 25085-41-0

CMF (C7 H12 O2 . C4 H6 O2 . C3 H4 O2)x

CCI PMS

CM 2

CRN 141-32-2 CMF C7 H12 O2

CRN 108-05-4 CMF C4 H6 O2

 $AcO-CH=CH_2$

CM

CRN 79-10-7 CMF C3 H4 O2

162102-52-5 HCAPLUS RN CN

2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, iron(3+) salt (9CI) (CA INDEX NAME)

CM

CRN 25035-82-9

(C7 H12 O2 . C4 H6 O2)x CMF

CCI PMS

CM 2

CRN 141-32-2 CMF C7 H12 O2

$$\begin{matrix} \text{O} \\ \parallel \\ \text{n-BuO-C-CH} \end{matrix} = \text{CH}_2$$

CM 3

CRN 79-41-4 CMF C4 H6 O2

162102-53-6 HCAPLUS RN

```
Sastri
                                                          10/774,617
      2-Propenoic acid, polymer with butyl 2-propenoate and ethenyl acetate, iron(3+) sodium salt (9CI) (CA INDEX NAME)
CN
      CM
            1
          25085-41-0
      CRN
            (C7 H12 O2 . C4 H6 O2 . C3 H4 O2)x
      CMF
            CM
                  2
            CRN 141-32-2
            CMF C7 H12 O2
n-BuO-C-CH=CH2
            CM
                  3
            CRN 108-05-4
            CMF C4 H6 O2
AcO-CH=-CH_2
```

CM 1

CRN 30323-62-7

CMF (C8 H8 . C7 H12 O2 . C5 H8 O2 . C3 H4 O2)x

CCI PMS

CM 2

CRN 141-32-2

CMF C7 H12 O2

CRN 140-88-5 CMF C5 H8 O2

CM

CRN 100-42-5 CMF C8 H8

$$H_2C = CH - Ph$$

CM 5

CRN 79-10-7 CMF C3 H4 O2

RN

162102-55-8 HCAPLUS 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenylbenzene and ethyl 2-propenoate, iron(3+) salt (9CI) (CA CN INDEX NAME)

CM 1

31671-56-4

CMF (C8 H8 . C7 H12 O2 . C5 H8 O2 . C4 H6 O2)x

CCI PMS

> CM 2

CRN 141-32-2 CMF C7 H12 O2

n-BuO-C-CH=CH2

CM

CRN 140-88-5 CMF C5 H8 O2

```
0
||
EtO- C- CH--- CH<sub>2</sub>
```

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CM 5

CRN 79-41-4 CMF C4 H6 O2

$$\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me-C-CO}_2 \text{H} \end{array}$$

RN 162102-56-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene, methyl
2-methyl-2-propenoate and 2-propenenitrile, iron(3+) salt (9CI)
(CA INDEX NAME)

CM 1

CRN 30579-78-3

CMF (C8 H8 . C5 H8 O2 . C4 H6 O2 . C3 H3 N) $\mathbf x$

CCI PMS

CM 2

CRN 107-13-1 CMF C3 H3 N

 $H_2C = CH - C = N$

CM 3

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CM 4

CRN 80-62-6 CMF C5 H8 O2

H₂C O || || Me- C- C- OMe

CM 5

CRN 79-41-4 CMF C4 H6 O2

 $\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me-C-CO}_2 \text{H} \end{array}$

IT 162102-57-0

RL: MOA (Modifier or additive use); USES (Uses)
 (surfactants; crosslinkable polymer
 emulsions for pressure-sensitive
 adhesives)

RN 162102-57-0 HCAPLUS

CN Butanedioic acid, methylene-, polymer with butyl 2-propenoate, ethenylbenzene and 2-propenoice acid, ironl(3+) salt (9CI) (CA INDEX NAME)

CM 1

CRN 70714-90-8 CMF (C8 H8 . C7 H12 O2 . C5 H6 O4 . C3 H4 O2)x CCI PMS

CM 2

CRN 141-32-2 CMF C7 H12 O2

 $\stackrel{\text{O}}{\parallel}_{\text{n-BuO-C-CH-CH-}}$

CM 3

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CM 4

CRN 97-65-4

CMF C5 H6 O4

```
CH<sub>2</sub>
HO2C-C-CH2-CO2H
          CM
               5
              79-10-7
          CRN
          CMF C3 H4 O2
HO-C-CH=CH_2
IC
     ICM C09J133-06
     ICS C09J007-02
CC
     38-3 (Plastics Fabrication and Uses)
     pressure sensitive adhesive
     crosslinkable polymer; methacrylic acid
     copolymer iron salt; acrylic acid copolymer
     iron salt; crosslinking agent acrylic polymer emulsion
IT
     Ionomers
     RL: TEM (Technical or engineered material use); USES (Uses)
        (crosslinkable polymer emulsions for pressure
        -sensitive adhesives)
IT
     Crosslinking agents
        (ferric salts; crosslinkable polymer emulsions for
        pressure-sensitive adhesives)
IT
    Alcohols, uses
     Amines, uses
     Fatty acids, uses
     Phenols, uses
     RL: MOA (Modifier or additive use); USES (Uses)
        (ethoxylated, surfactants; crosslinkable
        polymer emulsions for pressure-sensitive
        adhesives)
IT
    Naphthenic acids, reactions
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (iron salts, crosslinking agents;
        crosslinkable polymer emulsions for pressure-
        sensitive adhesives)
IT
     Surfactants
        (nonionic, stabilizers; crosslinkable polymer
        emulsions for pressure-sensitive
        adhesives)
IT
    Adhesive tapes
       Adhesives
        (pressure-sensitive, crosslinkable
        polymer emulsions for pressure-sensitive
        adhesives)
     162102-51-4P 162102-52-5P 162102-53-6P
     162102-54-7P 162102-55-8P 162102-56-9P
    RL: IMF (Industrial manufacture); TEM (Technical or engineered
     material use); PREP (Preparation); USES (Uses)
        (crosslinkable polymer emulsions for pressure
        -sensitive adhesives)
```

```
ΙT
    9002-93-1, Triton X 165
     RL: MOA (Modifier or additive use); USES (Uses)
        (crosslinkable polymer emulsions for pressure
       -sensitive adhesives)
    1120-45-2, Ferric oleate
                             3130-28-7, Ferric octanoate
    7321-53-1, Ferric 2-ethylhexanoate 14534-87-3, Ferric benzoate
     69165-36-2, Ferric hexanoate
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (crosslinking agents; crosslinkable polymer
       emulsions for pressure-sensitive
IT
    9003-11-6, Ethylene oxide-propylene oxide copolymer 39393-07-2
     53694-15-8 106392-12-5, Pluronic F 87 162102-57-0
    RL: MOA (Modifier or additive use); USES (Uses)
       (surfactants; crosslinkable polymer
       emulsions for pressure-sensitive
       adhesives)
L227 ANSWER 47 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1994:491914 HCAPLUS <<LOGINID::20060124>>
                      121:91914
DOCUMENT NUMBER:
TITLE:
                      Self-lubricating abrasion-resistant material
                       and products
INVENTOR(S):
                       Liu, Andrew T. C.
PATENT ASSIGNEE(S):
                       Dentsply International, Inc., USA
SOURCE:
                      Eur. Pat. Appl., 24 pp.
                       CODEN: EPXXDW
DOCUMENT TYPE:
                       Patent
                       English
LANGUAGE:
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:
    PATENT NO. KIND DATE APPLICATION NO.
                                                               DATE
    EP 599223
                       A1 19940601 EP 1993-118668
                                                               1993
                                                               1119
        R: CH, DE, FR, GB, IT, LI
                       AA 19940520 CA 1993-2103398
    CA 2103398
                                                               1993
                                                               1118
    CA 2103398
                    C 20031014
PRIORITY APPLN. INFO.:
                                         US 1992-979093 A
                                                               1992
                                                               1119
    A dental composition including a self-lubricating abrasion-resistant
AB
```

AB A dental composition including a self-lubricating abrasion-resistant material is used to form dental products having an outer surface with a low kinetic coefficient of friction. The dental products formed are abrasion resistant and self-lubricating across their entire cross sections. The self-lubricating material preferably includes polyethylene particles having a mol. weight of ≥106 and a particle size <80 µm and/or Si-containing compds. The composition is formed into a dental prosthesis, such as an artificial tooth, inlay, onlay, facing, crown, or bridge. Thus, prosthetic teeth were molded from an interpenetrating network prepared from Me methacrylate 26.83, ultrahigh-mol.-weight polyethylene treated with O and F (maximum particle size 50 µm) 4.00, Bz202 0.17, 2,2,2-trifluoroethyl acrylate 2.11, ethylene glycol dimethacrylate 2.37, urethane dimethacrylate copolymer (98.8:1.2)

41.30, poly(Me methacrylate) 20.65, and pigment 1.05%. IT 156573-10-3

RL: BIOL (Biological study)

(interpenetrating networks with Me methacrylate polymers, self-lubricating particles in matrix of, for dental prostheses)

RN 156573-10-3 HCAPLUS

11,14-Dioxa-2,9-diazaheptadec-16-enoic acid, 4,4,6,12,16-pentamethyl-10,15-dioxo-, 1-methyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 1,2-ethanediyl bis(2-methyl-2-propenoate), methyl 2-methyl-2-propenoate and 2,2,2-trifluoroethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CN

CRN 105883-40-7 CMF C25 H42 N2 O8

PAGE 1-B

CM 2

CRN 407-47-6 CMF C5 H5 F3 O2

CM 3

CRN 97-90-5 CMF C10 H14 O4

CM 4

CRN 80-62-6 CMF C5 H8 O2

```
H<sub>2</sub>C 0
Me-C-C-OMe
     ICM A61K006-083
IC
     ICS C08L051-00
CC
     63-7 (Pharmaceuticals)
     Section cross-reference(s): 38
IT
     76429-30-6
                 147554-84-5 156573-10-3 156573-11-4
     156573-12-5
     RL: BIOL (Biological study)
         (interpenetrating networks with Me methacrylate polymers,
        self-lubricating particles in matrix of, for dental prostheses)
L227 ANSWER 48 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         1993:518872 HCAPLUS <<LOGINID::20060124>>
DOCUMENT NUMBER:
                          119:118872
TITLE:
                          Low-odor UV pressure-sensitive
                          adhesives
AUTHOR(S):
                         Miller, Henry C.
CORPORATE SOURCE:
                          Oaklands Corp. Cent., Sartomer Co., Exton, PA,
                          19341, USA
SOURCE:
                          RadTech '92 North Am. UV/EB Conf. Expo., Conf.
                          Proc. (1992), Volume 2, 739-50. RadTech Int.
                          North Am.: Northbrook, Ill.
                          CODEN: 58SXA8
DOCUMENT TYPE:
                          Conference
LANGUAGE:
                          English
     Formulations, properties, and application variables for low-odor
     UV-curable pressure-sensitive adhesives are
     discussed. The main ingredients are 12 acrylate monomers, 3 tackifiers, and a highly flexible urethane
     diacrylate.
CC
     38-3 (Plastics Fabrication and Uses)
     UV curable pressure sensitive adhesive; low
     odor adhesive formulation property; urethane
     diacrylate blend adhesive; acrylate monomer blend
     adhesive; tackifier pressure sensitive adhesive
IT
     Tackifiers
        (rosin esters and resins as, for low-odor UV-curable
        pressure-sensitive adhesives)
TT
     Urethane polymers, compounds
     RL: USES (Uses)
        (acrylates, for low-odor UV-curable pressure
        -sensitive adhesives)
     Resin acids and Rosin acids
     RL: USES (Uses)
        (esters, tackifiers, for low-odor UV-curable pressure
        -sensitive adhesives)
IT
     Crosslinking catalysts
        (photochem., for low-odor UV-curable pressure
        -sensitive adhesives)
     Crosslinking
IT
        (photochem., of low-odor pressure-sensitive
        adhesives, UV-induced)
IT
     Adhesives
        (pressure-sensitive, UV-curable, low-odor,
```

formulations and properties and application variables of)

1T 2399-48-6 7328-17-8 9016-45-9 48145-04-6, 2-Phenoxyethyl acrylate 55462-93-6, Isododecyl acrylate 82727-34-2 149315-74-2, CN 966 149615-25-8

RL: USES (Uses)

(for low-odor UV-curable pressure-sensitive

adhesives)
IT 105-59-9 119-61-9, Benzophenone, uses 149260-52-6

RL: USES (Uses)

(photoinitiators, for curing of for low-odor UV-curable pressure-sensitive adhesives)

IT 115-77-5, uses RL: USES (Uses)

(rosin ester modified with, tackifiers, for low-odor UV-curable
pressure-sensitive adhesives)

IT 149659-55-2, Norsolene A 100 149659-56-3, Norsolene AR 95

RL: USES (Uses)

(tackifiers, for low-odor UV-curable pressure
-sensitive adhesives)

L227 ANSWER 49 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1991:614919 HCAPLUS <<LOGINID::20060124>>

DOCUMENT NUMBER: 115:214919

TITLE: Fluorine- and/or silicone-containing

poly(alkylene oxide) block copolymers and

contact lenses therefrom

INVENTOR(S): Mueller, Karl F.; Plankl, Walter L.

PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz. SOURCE: Eur. Pat. Appl., 22 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PAT	TENT NO.		KIN	D	DATE		API	PLICAT	ION I	NO.		DATE
				-								
ΕP	406161		A2		1991	0102	EP	1990-	8104	28		
												1990
FD	406161		7.3		1992	0129						0612
	406161											
	R: AT,						GB, GF	R, IT,	LI,	LU,	NL,	SE
US	5115056		Α		1992	0519	US	1990-	4864	93		
												1990
E.C	2068376		тa		1005	0416	ES	1000-	0104	20		0228
113	2000370		13		1995	0410	ES	1990-	0104	20		1990
												0612
CA	2019177		AA		1990	1220	CA	1990-	2019:	177		
												1990
חח	299437		7.5		1002	0416	DD	1000-	2417	70		0618
טט	299437		AS		1332	0410	טט	1990-	341/	70		1990
												0618
ΑU	9057683		Al		1991	0103	AU	1990-	57683	3		
												1990
B 7 7	626250		ъ.		1000							0619
	636359 03037620		B2 A2		1993		JР	1990-	15884	5.4		
O L	03037020		AZ		± > > 1.1	0213	UF	1790-	12000	J =		1990

Sastri 10/774,617 01/25/2006

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0619
     JP 2925661
                          B2
                                 19990728
     US 5334681
                          Α
                                 19940802
                                             US 1993-168979
                                                                     1993
                                                                     1217
PRIORITY APPLN. INFO.:
                                             US 1989-368755
                                                                     1989
                                                                     0620
                                             US 1990-486493
                                                                     1990
                                                                     0228
                                             US 1990-630711
                                                                  B1
                                                                     1990
                                                                     1220
                                             US 1992-931646
                                                                  B1
                                                                     1992
                                                                     0817
                                             US 1993-73644
                                                                     1993
                                                                     0608
AR
     F- and/or Si-containing block copolymers (Markush given) are
     described, which are the copolymn. product of mono-, di- or
     trivinyl-substituted poly(alkylene oxide) prepolymers and
```

F- and/or Si-containing block copolymers (Markush given) are described, which are the copolymn. product of mono-, di- or trivinyl-substituted poly(alkylene oxide) prepolymers and fluoroalkylalkylene acrylates or methacrylates, oligosiloxysilylalkyl acrylates or methacrylates, and optionally other copolymerizable comonomers. The block copolymers are prepared in solution or bulk and are characterized by high O permeability, flexibility and wettability and are therefore suited as biocompatible polymers, especially as contact lenses. A mixture of 5 g poly(ethylene oxide)urethane dimethacrylate (preparation given), 5 g tris(trimethylsiloxy)silylpropyl methacrylate, 4 g N-methylpyrrolidone, 6 g Me Et ketone and 0.4% benzoin Me ether, was UV-irradiated to give a clear, flexible hydrogel, suitable for contact lenses.

IT 134503-49-4P

RL: THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); USES (Uses)
 (preparation of, for contact lenses)

RN 134503-49-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2,2,2-trifluoro-1 (trifluoromethyl)ethyl ester, polymer with α-[1-methyl-2 [[[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]amino]carbonyl]amino]e
 thyl]-ω-[1-methyl-2-[[[[2-[(2-methyl-1-oxo-2 propenyl)oxy]ethyl]amino]carbonyl]amino]ethoxy]poly(oxy-1,2 ethanediyl), block (9CI) (CA INDEX NAME)

CM 1

CRN 134462-34-3 CMF (C2 H4 O)n C20 H34 N4 O7 CCI PMS

PAGE 1-A H₂C Me - 0— СH₂— СH₂— NH— С— NH— СH₂— СН-O-CH2-CH2 PAGE 1-B O CH₂ CH-CH2-NH-C-NH-CH2-CH2-O-C-C-Me CM 2 CRN 3063-94-3 CMF C7 H6 F6 O2 O CH₂ - C-- C-- Me F3C-CH-CF3 ICM C08F283-06 ICS G02C007-04 ICI C08F283-06, C08F214-00 63-7 (Pharmaceuticals) Section cross-reference(s): 38 134443-73-5P 134462-35-4P 134462-36-5P 134462-37-6P 134462-38-7P 134462-39-8P 134462-40-1P 134462-41-2P 134462-42-3P 134462-43-4P 134503-47-2P 134503-48-3P 134503-65-4P 134503-49-4P 134503-50-7P 134503-64-3P 134503-66-5P 134503-68-7P 134503-69-8P 134503-70-1P 134503-73-4P 134503-71-2P 134503-72-3P 134503-74-5P 134503-75-6P 134590-69-5P 134590-70-8P 134623-69-1P 134685-73-7P RL: THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of, for contact lenses) L227 ANSWER 50 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 1991:144777 HCAPLUS <<LOGINID::20060124>> DOCUMENT NUMBER: 114:144777 TITLE: Process for the production of an attenuator material for acoustic waves and its use in the production of immersed acoustical screens INVENTOR(S): Guyomar, Daniel; Tocquet, Bernard; Candau, Sauveur; Lemarechal, Pierre; Schroder, Andre Thomson-CSF S. A., Fr. PATENT ASSIGNEE(S): SOURCE: Eur. Pat. Appl., 7 pp.

CODEN: EPXXDW

Patent

French

DOCUMENT TYPE:

FAMILY ACC. NUM. COUNT: 1

LANGUAGE:

CC

IT

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ED 202627		10000016	DD 1000 400333	
EP 382627	A1	19900816	EP 1990-400322	1000
				1990
D. DE EC CD	Tm NT	CIP.		0206
R: DE, ES, GB,	•	•		
FR 2642750	A1	19900810	FR 1989-1677	
		•		1989
				0209
FR 2642750	B1	19910412		
CA 2009608	AA	19900809	CA 1990-2009608	
				1990
				0208
JP 02261805	A2	19901024	JP 1990-29380	0200
UF 02201003	AZ	19901024	UP 1990-29360	1000
				1990
				0208
PRIORITY APPLN. INFO.:			FR 1989-1677	P
				1989
				0209

AB Title method comprises preparing an aqueous solution containing a monomer and a crosslinking agent, dispersing a water-gellable polymer porous powder in the solution, and crosslinking the mixture Thus, dispersing 3 g Norsocryl powder in a mixture of H2O 80, acrylic acid 20, N,N'-methylenebisacrylamide 0.2, ammonium or K persulfate 0.66 g and curing 2 h at 70° gave a phase for manufacture of immersed acoustical screens.

ΙT 132893-93-7, Norsocryl

RL: USES (Uses)

(for attenuator material for acoustic waves)

RN 132893-93-7 HCAPLUS

CN Norsocryl (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IC ICM C08J003-00 ICS C08F291-00

CC 37-6 (Plastics Manufacture and Processing)

IT 132893-93-7, Norsocryl

RL: USES (Uses)

(for attenuator material for acoustic waves)

L227 ANSWER 51 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1990:480638 HCAPLUS <<LOGINID::20060124>>

DOCUMENT NUMBER:

INVENTOR(S):

113:80638

TITLE:

Trifluoromethyl-terminated polymer releasing

agents for silicone adhesive tapes Takahashi, Shuichi; Domoto, Tadanori;

Takahata, Eiji

PATENT ASSIGNEE(S): SOURCE:

Nitto Denko Corp., Japan Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

> PATENT NO. KIND DATE APPLICATION NO. DATE --------------

JP 02060980

A2 19900301

JP 1988-213325

PRIORITY APPLN. INFO.:

0826

JP 1988-213325

1988 0826

1988

AB The title releasing agents comprise carbon or siloxane main chains with CF3-terminated C1-10 fluoroalkyl side chains, at Mw/Nf <500 (Mw = weight-average mol. weight; Nf = number of CF3 in mol.). A siloxane with Mw 43,000, polymerized from F3CSiCl2H (I) 130, Me3SiCl 5, and H2C:CHSiCl2H 10 mol, was dissolved in F3CPh, mixed with 0.5 phr Pt catalyst, applied 0.5 g/m2 (solid base) on a 50-µm polyester film, and dried 5 min at 150° to give a separator having peel strength (to silicone-based adhesive tape) 60 g/50 mm and adhesive strength retention (for the peeled adhesive tape, tested on stainless sttel) 98%, vs. 600 and 85, resp., for a separator containing MeSiCl2H instead of I.

IT 110226-65-8

RL: USES (Uses)

(releasing agents, for silicone-based adhesives)

RN 110226-65-8 HCAPLUS

CN 2-Propenoic acid, polymer with 2,2,2-trifluoroethyl 2-propenoate
 (9CI) (CA INDEX NAME)

CM 1

CRN 407-47-6 CMF C5 H5 F3 O2

CM 2

CRN 79-10-7 CMF C3 H4 O2

IC ICM C09J007-02

ICA C08G077-24

CC 42-10 (Coatings, Inks, and Related Products)

IT Adhesives

(pressure-sensitive, silicone-based, releasing agents for, trifluoromethyl-terminated polymers as)

IT 110226-65-8

RL: USES (Uses)

(releasing agents, for silicone-based adhesives)

L227 ANSWER 52 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1990:200167 HCAPLUS <<LOGINID::20060124>>

DOCUMENT NUMBER: 112:200167

TITLE: Acrylate copolymer compositions as

Sastri 10/774,617 01/25/2006

pressure-sensitive

adhesives

INVENTOR(S):

Sasaki, Makoto; Egashira, Ken

PATENT ASSIGNEE(S):

Minnesota Mining and Manufacturing Co., USA

SOURCE:

Eur. Pat. Appl., 7 pp. CODEN: EPXXDW

DOCUMENT TYPE: Pat

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.		DATE	APPLICATION NO.	DATE
	EP 338724	A2	19891025	EP 1989-303655	1989
					0413
	EP 338724				
	EP 338724 R: BE, DE, ES,				
	JP 01271472			JP 1988-96656	
					1988 0419
	AU 610367	B2	19910516	AU 1989-31795	
					1989 0329
	AU 8931795	7.1	19891026		0329
	BR 8901695	A		BR 1989-1695	
	BR 0301033	A	17071121	BR 1909 1095	1989
					0410
	ES 2053984	Т3	19940801	ES 1989-303655	0110
					1989
					0413
	ZA 8902835	Α	19901228	ZA 1989-2835	
					1989
					0418
PRIOR	RITY APPLN. INFO.:			JP 1988-96656 A	
					1988
					0419

AB A pressure-sensitive adhesive,

useful for bonding plasticized plastics, even after aging, comprises a copolymer of Bu acrylate (I), an unsatd. carboxylic acid, and optionally ≥1 copolymerizable vinyl compound, and an isocyanate crosslinking agent to crosslink
10-60% of the polar groups in the copolymer. Thus, I 95,
acrylic acid 5, Bz202 0.02, and AcOEt 130 parts
were polymerized at 80-85° for 20 h under N, and mixed with
PhMe and Coronate L to form an adhesive. The adhesive was coated
on a primed polyester film, dried, and bonded to a plasticized
poly(vinyl chloride) film to prepare a test tape showing initial
room temperature adhesion 85.0 N/dm and aged adhesion (after storage at
80° for 10 days and at ambient temperature for 1 h) 59.9 N/dm,
compared with 83.0 and 13.5, resp., for a similar adhesive composition
prepared by copolymn. for 8 h using 0.01 part Bz202.
25119-83-9, Acrylic acid-butyl

IT 25119-83-9, Acrylic acid-butyl acrylate copolymer 29960-87-0, Acrylic acid-butyl acrylate-methyl acrylate-methyl methacrylate copolymer 126895-96-3, Acrylonitrile-butyl acrylate-maleic anhydride-vinyl acetate copolymer

RL: USES (Uses)

(pressure-sensitive adhesives,

isocyanate-crosslinked, for plasticized plastics)

RN 25119-83-9 HCAPLUS

CN 2-Propenoic acid, polymer with butyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

CM 2

CRN 79-10-7 CMF C3 H4 O2

$$\begin{matrix} \text{O} \\ || \\ \text{HO-C-CH} = \text{CH}_2 \end{matrix}$$

CN

RN 29960-87-0 HCAPLUS

2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, methyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

CM 2

CRN 96-33-3 CMF C4 H6 O2

CM 3

CRN 80-62-6 CMF C5 H8 O2

CRN 79-10-7 CMF C3 H4 O2

RN 126895-96-3 HCAPLUS

CN 2-Propenoic acid, butyl ester, polymer with ethenyl acetate, 2,5-furandione and 2-propenenitrile (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{n-BuO-C-CH-----} \text{CH}_2 \end{array}$$

CM 2

CRN 108-31-6 CMF C4 H2 O3

CM 3

CRN 108-05-4 CMF C4 H6 O2

 $Aco-CH=CH_2$

CM 4

CRN 107-13-1 CMF C3 H3 N

 $H_2C = CH - C = N$ ICM C09J003-14 IC ICS C08F220-18; C09J007-02 38-3 (Plastics Fabrication and Uses) CC Section cross-reference(s): 35 polyacrylate adhesive plastic; acrylic copolymer adhesive pressure sensitive; isocyanate crosslinker acrylic copolymer adhesive IT Adhesives (pressure-sensitive, isocyanate-crosslinked acrylate copolymers, for plasticized plastics) TΤ 25119-83-9, Acrylic acid-butyl acrylate copolymer 29960-87-0, Acrylic acid-butyl acrylate-methyl acrylate-methyl methacrylate copolymer 126895-96-3, Acrylonitrile-butyl acrylate-maleic anhydride-vinyl acetate copolymer RL: USES (Uses) (pressure-sensitive adhesives, isocyanate-crosslinked, for plasticized plastics) L227 ANSWER 53 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: DOCUMENT NUMBER: 112:169915 TITLE: Ionic conductivity in the poly(propylene glycol) -poly (methyl methacrylate)-lithium trifluoromethanesulfonate system AUTHOR (S): Svantesson, P. A.; Albinsson, I.; Mellander, B. E. CORPORATE SOURCE: Dep. Phys., Chalmers Univ. Technol., Goeteborg, S-412 96, Swed. SOURCE: Zeitschrift fuer Naturforschung, A: Physical Sciences (1989), 44(12), 1231-3 CODEN: ZNASEI; ISSN: 0932-0784 DOCUMENT TYPE: Journal LANGUAGE: English The temperature dependence of the ionic conductivity in the PPG-rich part of the ternary system poly(propylene glycol)-poly(Me methacrylate) -LiCF3SO3 has been investigated. The highest conductivity values, $3 + 10-5 (\Omega cm) -1$ at 31° and 4 +10-4 (Ω cm)-1 at 77°, were obtained for samples which had the properties of a pressure-sensitive adhesive. The temperature dependence of the ionic conductivity could be well described by the Vogel-Tammann-Fulcher equation. CC 76-2 (Electric Phenomena) Section cross-reference(s): 52 L227 ANSWER 54 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN 1990:160678 HCAPLUS <<LOGINID::20060124>> ACCESSION NUMBER: DOCUMENT NUMBER: 112:160678 TITLE: Antiblocking perfluoropolyether coatings INVENTOR(S): McIntyre, Daniel K. PATENT ASSIGNEE(S): Minnesota Mining and Manufacturing Co., USA SOURCE: Eur. Pat. Appl., 11 pp. CODEN: EPXXDW DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

I	PAT	ENT NO.			KIN)	DATE		API	PLICATION NO.		DATE
-						-					-	
•												
F	EΡ	339880			A2		19891102		EΡ	1989-303982		
												1989
												0421
F	EΡ	339880			A 3		19900314					
F	EΡ	339880			B1		19931208					
		R: CH,	DE,	FR,	GB,	IT,	, LI, NL,	SE				
τ	JS	4873140			Α		19891010		US	1988-186955		
												1988
												0427
I	UΑ	8931369			A1		19891102		ΑU	1989-31369		
												1989
												0316
I	UA	614342			B2		19910829					
(CA	1330912			A1		19940726		CA	1989-593950		
												1989
												0316
ن	JP	02014278			A2		19900118		JP	1989-107095		
												1989
												0426
ŀ	KR	9710599			В1		19970628		KR	1989-5499		
												1989
												0426
PRIORI	TY	APPLN. 1	NFO.	:					US	1988-186955	Α	
												1988
												0427

AΒ The title coatings, especially useful as release liners for pressure-sensitive adhesive tapes, are polymerized in situ from oligo(meth)acrylates containing [CF(CF3)CF20]n segments with number-average mol. weight 800-25,000. The oligomer acrylate C3FnO[CF(CF3)CF20]10CF(CF3)CH2OCOCH:CH2 was coated (.apprx.70 nm) as a 1% C2Cl3F3 solution on a 0.05-mm PET film, dried, and exposed at 30 cm/s to 2 120-W/cm Hg lamps to give a release coating. In testing with an aggressive pressure-sensitive adhesive tape, this film showed release adhesion 0.5 N/dm and readhesion of the tape to glass 43 N/dm before, and 1.2 and 42, resp., after, being aged for 3 days at 70°. IT 126288-74-2

RL: USES (Uses)

(release coatings, for use with pressure-sensitive

adhesive tapes)

RN126288-74-2 HCAPLUS CN

Poly[oxy[trifluoro(trifluoromethyl)-1,2-ethanediyl]], α -(heptafluoropropyl)- ω -[1,2,2,2-tetrafluoro-1-[[(1-

oxo-2-propenyl)oxy]methyl]ethoxy]-, homopolymer (9CI) (CA INDEX

NAME)

CM 1

CRN 126288-73-1

CMF (C3 F6 O)n C9 H5 F11 O3

CCI IDS, PMS

$$F_3C-CF_2-CF_2$$
 $O-(C_3F_6)$ n $O-C-CH_2-O-C-CH=-CH_2$

IC ICM C08F020-22

ICS C09D003-78; C09J007-02

CC 42-10 (Coatings, Inks, and Related Products)

IT Adhesive tapes

> (pressure-sensitive, release coatings for use with, photocurable perfluorooligoether acrylates as)

IT Parting materials

(release coatings, photocurable, perfluorooligoether acrylate polymers, for use with pressure-sensitive adhesive tapes)

ΙT 126288-74-2

RL: USES (Uses)

(release coatings, for use with pressure-sensitive adhesive tapes)

L227 ANSWER 55 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1989:575740 HCAPLUS <<LOGINID::20060124>>

DOCUMENT NUMBER:

111:175740

TITLE:

Peelable pressure-sensitive

adhesives from storage-stable acrylic

polymer emulsions Iwasaki, Keitaro

. INVENTOR(S):

PATENT ASSIGNEE(S):

SOURCE:

Toyo Ink Mfg. Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

LANGUAGE:

Patent Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01075577	A2	19890322	JP 1987-233192	
				1987
				0917
JP 07084581	B4	19950913	TD 4000 000400	
PRIORITY APPLN. INFO.:			JP 1987-233192	1007
				1987
				0917

AΒ Peelable adhesives which do not harden over time, useful for mounting photographs under clear plastic sheets in albums, are aqueous dispersions prepared by neutralizing with volatile amines or NH3 100 parts (solids) tacky acrylic emulsion polymers including 0.5-10% carboxy monomers, and also contain 0.05-5.0 parts epoxy silanes and 0.05-5.0 parts compds. having ≥2 aziridinyl groups. Neutralization of the polymers keeps them from reacting with the silanes and aziridines during storage, but when the emulsion is applied to a substrate and dried the amines or NH3 are driven off, and the polymer is crosslinked via the free carboxy groups. 2-Ethylhexyl acrylate 60, n-Bu acrylate 30, and acrylic acid 4.5 parts were polymerized in water containing anionic surfactants, nonionic surfactants

, and (NH4)2S2O8 to give an emulsion, which was mixed with 0.1 part methyltri(glycidyloxy)silane (I) and 0.5 part (solids) aqueous dispersion of diphenylmethanebis(4,4-N,N-diethyleneurea) to give a pressure-sensitive adhesive.

Photograph album pages were coated with the adhesive, dried, and covered with oriented polypropylene films, which showed adhesion (at 23°) 40 g/135 mm initially and 50 g/135 mm after 8 h under a UV lamp, vs. 200 and 250 g/135 mm, resp., without the I, or 200 and 500 g/135 mm, resp., for a com. natural rubber adhesive.

IT 123236-25-9 123236-26-0 123236-27-1

RL: TEM (Technical or engineered material use); USES (Uses) (adhesives, formed from storage-stable emulsions, pressure-sensitive, peelable)

RN 123236-25-9 HCAPLUS

CN 2-Propenoic acid, polymer with butyl 2-propenoate, 2-ethylhexyl 2-propenoate, N,N'-(methylenedi-4,1-phenylene)bis[1-aziridinecarboxamide] and methyltris(oxiranylmethoxy)silane (9CI) (CA INDEX NAME)

CM 1

CRN 58213-70-0 CMF C10 H18 O6 Si

CM 2

CRN 7417-99-4 CMF C19 H20 N4 O2

CM 3

CRN 141-32-2 CMF C7 H12 O2

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \text{CH}_2-\text{O}-\text{CH} \longrightarrow \text{CH}_2 \\ \text{CH}_2-\text{CH} \longrightarrow \text{CH}_2 \end{array}$$
 Et-CH-Bu-n

CM 5

CRN 79-10-7 CMF C3 H4 O2

RN 123236-26-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenyl acetate, 2-ethylhexyl 2-propenoate, N,N'-(methylenedi-4,1-phenylene)bis[1-aziridinecarboxamide], 2-propenoic acid and trimethoxy[3-(oxiranylmethoxy)propyl]silane (9CI) (CA INDEX NAME)

CM 1

CRN 7417-99-4 CMF C19 H20 N4 O2

CM 2

CRN 2530-83-8 CMF C9 H20 O5 Si

CRN 108-05-4 CMF C4 H6 O2

$$Aco-CH=CH_2$$

CM 4

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \mathsf{CH}_2-\mathsf{CH} \longrightarrow \mathsf{CH}_2\\ | \\ \mathsf{Et}-\mathsf{CH}-\mathsf{Bu}-\mathsf{n} \end{array}$$

CM 5

CRN 80-62-6 CMF C5 H8 O2

$$H_2C$$
 O \parallel \parallel \parallel $Me-C-C-OMe$

CM 6

CRN 79-10-7 CMF C3 H4 O2

RN 123236-27-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-ethylhexyl 2-propenoate, N,N'-(4-methyl-1,3-phenylene)bis[1-aziridinecarboxamide], 2-propenoic acid and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CRN 3388-04-3 CMF C11 H22 O4 Si

$$\begin{array}{c} \text{OMe} \\ | \\ \text{CH}_2\text{--}\text{CH}_2\text{--}\text{Si--}\text{OMe} \\ | \\ \text{OMe} \end{array}$$

CM 2

CRN 2131-75-1 CMF C13 H16 N4 O2

CM 3

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \text{CH}_2-\text{O}-\text{CH}-\text{CH}-\text{CH}_2\\ |\\ \text{Et}-\text{CH}-\text{Bu}-\text{n} \end{array}$$

CM 4

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{ccc} ^{H_2C} & \text{O} \\ & || & || \\ \text{Me-} & \text{C-} & \text{C-} & \text{OMe} \end{array}$$

CM 5

CRN 79-10-7 CMF C3 H4 O2

IT 26710-97-4D, neutralized with volatile amines or ammonia 30705-21-6D, neutralized with volatile amines or ammonia 72108-15-7D, neutralized with volatile amines or ammonia

RL: USES (Uses)

(emulsions, containing epoxy silanes and aziridines, storage-stable pressure-sensitive adhesives)

RN 26710-97-4 HCAPLUS

CN 2-Propenoic acid, polymer with butyl 2-propenoate and 2-ethylhexyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

CM 2

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \text{CH}_2-\text{CH}-\text{CH}-\text{CH}-\text{CH}_2 \\ | \\ \text{Et}-\text{CH}-\text{Bu-n} \end{array}$$

CM 3

CRN 79-10-7 CMF C3 H4 O2

RN 30705-21-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with
2-ethylhexyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \text{CH}_2-\text{O-C-CH} = \text{CH}_2 \\ \text{CH}_2-\text{O-C-CH} = \text{CH}_2 \\ \text{Et-CH-Bu-n} \end{array}$$

CRN 80-62-6 CMF C5 H8 O2

CM 3

CRN 79-10-7 CMF C3 H4 O2

RN 72108-15-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenyl acetate, 2-ethylhexyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 108-05-4 CMF C4 H6 O2

ACO-CH-CH2

CM 2

CRN 103-11-7 CMF C11 H20 O2

```
CRN 80-62-6
     CMF C5 H8 O2
 H<sub>2</sub>C
      Ĭ
Me-C-C-OMe
     CM
          4
     CRN 79-10-7
     CMF C3 H4 O2
   0
HO-C-CH=CH2
    ICM C09J003-14
IC
     ICS C09J007-02
CC
     38-3 (Plastics Fabrication and Uses)
    pressure sensitive acrylic adhesive
     peelable; epoxy silane crosslinking acrylic adhesive;
     aziridine crosslinking acrylic emulsion adhesive;
     ethyleneurea crosslinking acrylic emulsion adhesive;
     photograph album peelable acrylic adhesive; latent
     crosslinking acrylic emulsion adhesive
IT
     Crosslinking agents
        (latent, epoxy silanes and aziridines, for carboxy-containing
        acrylic emulsion polymers neutralized with volatile amines)
IT
    Adhesives
        (peelable, pressure-sensitive, acrylic
        emulsions crosslinked with epoxy silanes and
        aziridines, for photograph albums)
IT
     Epoxides
     RL: USES (Uses)
        (silyl, crosslinking agents containing, for
        carboxy-containing acrylic polymer emulsions stabilized by
        neutralization)
ΙT
    123236-25-9 123236-26-0 123236-27-1
     RL: TEM (Technical or engineered material use); USES (Uses)
        (adhesives, formed from storage-stable emulsions,
        pressure-sensitive, peelable)
IT
                2530-83-8, 3-Glycidoxypropyltrimethoxysilane
     3388-04-3, 2-(3,4-Epoxycyclohexyl)ethyltrimethoxysilane
     7417-99-4
                58213-70-0
     RL: USES (Uses)
        (crosslinking agents containing, for carboxy-containing
        acrylic polymer emulsions stabilized by neutralization)
IT
    26710-97-4D, neutralized with volatile amines or ammonia
     30705-21-6D, neutralized with volatile amines or ammonia
    72108-15-7D, neutralized with volatile amines or ammonia
    RL: USES (Uses)
        (emulsions, containing epoxy silanes and aziridines, storage-stable
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3

L227 ANSWER 56 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

pressure-sensitive adhesives)

DOCUMENT NUMBER: 103:55112

TITLE: Emulsion-acrylic pressure-

sensitive adhesives

INVENTOR(S): Chang, Man Chium; Mao, Chung Ling; Vargas,

1985:455112 HCAPLUS <<LOGINID::20060124>>

Richard Raymond

PATENT ASSIGNEE(S): Avery International Corp., USA

SOURCE: PCT Int. Appl., 31 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

ACCESSION NUMBER:

PA 	TENT NO.		KIND	DATE	APPLICATION NO.	DATE
			A1	19850228	WO 1984-US1265	1984 0810
	W: AU, 1 RW: BE, 6 4564664	CH, DE,		19860114	US 1983-522491	1983 0812
AU	8433166		A1	19850312	AU 1984-33166	1984 0810
BR	8407023		A	19850730	BR 1984-7023	1984
EP	153386		A1	19850904	EP 1984-903226	0810 1984 0810
	R: BE, 6 60502010		Т2	19851121	JP 1984-503178	1984 0810
	07042446 1225792		B4 A1	19950510 19870818	CA 1984-460818	1984 0810
PRIORIT	Y APPLN. II	NFO.:			US 1983-522491 A	
					WO 1984-US1265 A	1984 0810

AB Pressure-sensitive adhesives are

manufactured by the two-stage, free-radical copolymn. of 50-95% soft monomers [homopolymer glass transition temperature (Tg) <0°] consisting of 5-30% C2-8 dialkyl fumarate and C2-10 alkyl acrylate and 5-50% hard monomers (homopolymer Tg >0°) consisting of ≤25% C2-6 alkyl methacrylate and ≤10% C2-8 unsatd. carboxylic acid. Thus, a stirred reaction vessel was charged with water 40, Fe3+ 0.01, NH4 phosphate 0.2, NH4OH 1, alkyl aryl ether disulfonate surfactant 2.5, and di-Bu fumarate 15 parts. A second emulsified monomer mixture consisting of water 30, sodium alkyl aryl polyether sulfonate emulsifier 2, 2-ethylhexyl acrylate 62, Me

01/25/2006

methacrylate 18, acrylic acid 5, tert-BuOOH 0.3, and dodecyl mercaptan 0.06 parts along with a reducing agent consisting of 20 parts water and 0.3 parts Na formaldehyde sulfoxalate was added portionwise to the reactor at 40°. When the temperature reached 45° the balance of the emulsified mixture was added at 2 parts/min while adding the initiator charge at 0.3 parts/min. The temperature was maintained at 45-50° until after the emulsified monomer mixture was added, then the temperature was increased to 60° for .apprx.1 h while the remaining Na formaldehyde sulfoxalate solution was added at 0.1 parts/min. The cooled adhesive on Kelex G vinyl plastic had 180° peel 17.4 N/25 mm with panel failure, compared with 18.0 N/25 mm with panel failure for the same adhesive crosslinked with chromium acetate [1066-30-4].

IT 97385-04-1P 97385-05-2P

RL: PREP (Preparation)

(adhesive, pressure-sensitive,

manufacture of, by emulsion polymerization)

RN 97385-04-1 HCAPLUS

2-Butenedioic acid (2E)-, dibutyl ester, polymer with 2-ethylhexyl 2-propenoate, methyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CN

CRN 105-75-9 CMF C12 H20 O4

Double bond geometry as shown.

CM 2

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \text{O} \\ || \\ \text{CH}_2 - \text{O} - \text{C} - \text{CH} \longrightarrow \text{CH}_2 \\ || \\ \text{Et} - \text{CH} - \text{Bu} - \text{n} \end{array}$$

CM 3

CRN 80-62-6 CMF C5 H8 O2

CRN 79-10-7 CMF C3 H4 O2

CN

RN 97385-05-2 HCAPLUS

2-Butenedioic acid (2E)-, dibutyl ester, polymer with ethenyl acetate, 2-ethylhexyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 108-05-4 CMF C4 H6 O2

 $Aco-CH=CH_2$

CM 2

CRN 105-75-9 CMF C12 H20 O4

Double bond geometry as shown.

CM 3

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{CH}_2\text{--O-C-CH} \end{array} \\ \text{CH}_2 \\ \text{Et-CH-Bu-n} \end{array}$$

CRN 79-10-7 CMF C3 H4 O2

о || но- с- сн- сн₂

IC ICM C08F018-14

CC 38-3 (Plastics Fabrication and Uses)

ST emulsion polymn acrylic polymer adhesive; pressure sensitive adhesive acrylic polymer; butyl fumarate acrylic copolymer adhesive

IT Crosslinking agents

(chromium acetate, for acrylic copolymer pressuresensitive adhesives)

IT Polymerization

(emulsion, of acrylic acid with di-Bu

fumarate, ethylhexyl acrylate and unsatd. ester, for

pressure-sensitive adhesive manufacture)

IT Adhesives

(pressure-sensitive, acrylic copolymers as, manufacture of by emulsion polymerization)

manufacture of, by emulsion polymerization)

IT 97385-04-1P 97385-05-2P

RL: PREP (Preparation)

(adhesive, pressure-sensitive,

manufacture of, by emulsion polymerization)

IT 1066-30-4

RL: MOA (Modifier or additive use); USES (Uses)

(crosslinking agents, for emulsion-polymerized acrylic adhesives)

L227 ANSWER 57 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1983:423753 HCAPLUS <<LOGINID::20060124>>

DOCUMENT NUMBER: 99:23753

TITLE: Pressure-sensitive acrylic

adhesive

INVENTOR(S): Ohmori, Akira; Tomihashi, Nobuyuki

PATENT ASSIGNEE(S): Daikin Kogyo Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 18 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 75191	A1	19830330	EP 1982-108260	1982 0908
EP 75191 R: DE, FR, GB	B1	19860611		
JP 58045275	A2	19830316	JP 1981-143342	1981 0910
JP 01057709	B4	19891207		0,010

01/25/2006

US 4504642 A 19850312 US 1982-416161

1982 0909

PRIORITY APPLN. INFO.:

JP 1981-143342

1981 0910

Adhesives useful in pressure-sensitive tapes and having good oil and water resistance contain acrylic polymers with ≥45% F, intrinsic viscosity 0.1-1.0 and glass transition temperature (Tg) <-5°. Thus, 100 mL BuOAc, 30 g pentafluoropropyl acrylate (I), and 0.1 g C12H25SH were heated at 60° while 0.15 g AIBN in 10 mL BuOAc was added dropwise. Heating 10 h, gave I polymer [29036-65-5] with Tg-26°and intrinsic viscosity 0.56 dL/g. I polymer (20 g) in 80 g 2:1 C2Cl3F3-BuOAc was coated on corona-treated, 150-μ polyester film and dried to give a 25 μ coating. The had 180° peel strength (300 mm/min) 1.55 kg/5 cm. After 2 h in spindle

91, and 100%, resp.
IT 29991-80-8 86217-02-9 86227-82-9

RL: TEM (Technical or engineered material use); USES (Uses) (adhesives, pressure-sensitive, oil- and

oil, ligroine, kerosine, or H2O, adhesion retention was 95, 85,

water-resistant) RN 29991-80-8 HCAPLUS

CN 2-Propenoic acid, 3,4,4,4-tetrafluoro-3-(trifluoromethyl)butyl
 ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 45188-02-1 CMF C8 H7 F7 O2

$$F_3C - CH_2 - CH_2 - CH_2 - CH_2 - CH_2 - CH_2 - CH_2$$
 CF_3

RN 86217-02-9 HCAPLUS

CN 2-Propenoic acid, 3,3,4,4,5,6,6,6-octafluoro-5-(trifluoromethyl)hexyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 86217-01-8 CMF C10 H7 F11 O2

RN 86227-82-9 HCAPLUS

CN 2-Propenoic acid, 2,2,3,3,4,5,5,5-octafluoro-4-(trifluoromethyl)pentyl ester, homopolymer (9CI) (CA INDEX NAME)

```
CM
     1
```

5

CRN 86227-81-8 CMF C9 H5 F11 O2

$$F_3C-CF_2-CF_2-CH_2-O-C-CH=CH_2$$

IC C09J003-14; C09J007-04

CC 38-3 (Plastics Fabrication and Uses)

fluoropolymer adhesive pressure sensitive;

acrylate pentafluoropropyl polymer adhesive; oil resistance adhesive; water resistance adhesive

ΙT Acrylic polymers, uses and miscellaneous

RL: TEM (Technical or engineered material use); USES (Uses)

(fluoroalkyl group-containing, adhesives,

pressure-sensitive, oil- and water-resistant)

IT Adhesives

(pressure-sensitive, fluoroalkyl acrylate polymers,

oil- and water-resistant)

IT 25656-08-0 26338-10-3 28602-51-9 29036-65-5

29991-80-8 86217-02-9 86227-80-7

86227-82-9 86227-84-1 86227-85-2 86227-86-3

86227-87-4 86227-88-5 86227-89-6 86227-90-9 86227-91-0

86227-92-1 86244-39-5

RL: TEM (Technical or engineered material use); USES (Uses)

(adhesives, pressure-sensitive, oil- and

water-resistant)

L227 ANSWER 58 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

DOCUMENT NUMBER: 95:195124

TITLE: Unsubbed organic film coated with an opaque

antistatic backing layer

INVENTOR(S):

Miller, Conrad Erve

PATENT ASSIGNEE(S):

du Pont de Nemours, E. I., and Co. , USA Eur. Pat. Appl., 17 pp. SOURCE:

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 30352	A2	19810617	EP 1980-107526	1980 1202
EP 30352 EP 30352 R: BE, DE, FR,	- •	•	VO 1070 100500	1202
US 4301239	А	19811117	US 1979-100520	1979 1205
JP 56092535	A2	19810727	JP 1980-172537	1980

1205

JP 59005886
PRIORITY APPLN. INFO.:

B4 19840207

US 1979-100520

1979 1205

AB Hydrophobic, energy-treated polyester photog. film supports are coated with an opaque antistatic backing layer comprised of C black, a polyacrylate and an aziridine crosslinking agent. When the backing layer is cured the aziridine agent crosslinks the polymer and also firmly bonds it to the polyester film supports, thus eliminating the need for a conventional subbing layer. Thus, a 30% Et acrylate-methacrylic acid-Me methacrylate (29:5:66) copolymer dispersion in H2O 57.0, a 32.5% C black dispersion in H2O 21.0, a 5% FC-128 (a fluorosurfactant) solution in H2O 0.2, trimethylolpropane tris[β -(N-aziridinyl)propionate] 1.7, and H2O 200.0 parts were mixed to give a slurry, aqueous NH4OH added to adjust the pH to 9.7, coated on a 4-mil poly(ethylene terephthalate) film support which had sufficiently C black dispersed therein to give an optical d. of 8 and was biaxially oriented, heat-set at 195-205°, heat-relaxed at 110-130°, and energy-treated on 1 side with an oxidizing flame (propane-air) with a 2 mil doctor knife, air-dried at 90°, and heat-relaxed at 100-105° to give a dry coating having a

both wet and dry, of the backing layer was excellent. IT 25133-97-5 79715-93-8

RL: USES (Uses)

(antistatic back layers containing carbon black, aziridine crosslinking agents and, for photog. films)

that the coating serves as a good antistatic layer. The adhesion,

surface resistance of 1.4 + 105 Ω /square, indicating

25133-97-5 HCAPLUS

2-Propenoic acid, 2-methyl-, polymer with ethyl 2-propenoate and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

RN

CN

CRN 140-88-5 CMF C5 H8 O2

CM 2

CRN 80-62-6 CMF C5 H8 O2

CM 3

CRN 79-41-4 CMF C4 H6 O2

RN 79715-93-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with butyl
2-propenoate, ethenylbenzene and 2-propenoic acid (9CI) (CA INDEX
NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

$$\begin{array}{c} \begin{smallmatrix} 0 \\ \parallel \\ n\text{-BuO-C-CH----} \end{smallmatrix} CH_2$$

CM 2

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CM 3

CRN 97-88-1 CMF C8 H14 O2

$$\begin{array}{ccc} & \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{n-BuO-C-C-Me} \end{array}$$

CM 4

CRN 79-10-7 CMF C3 H4 O2

IC G03C001-78; G03C001-82; G03C001-87; C08J007-04
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic

Processes) 25133-97-5 79715-93-8 IT RL: USES (Uses) (antistatic back layers containing carbon black, aziridine crosslinking agents and, for photog. films) 79679-12-2 IT 52234-82-9 RL: MOA (Modifier or additive use); USES (Uses) (crosslinking agents, for antistatic back layers containing carbon black, polyacrylate and surfactant for photog. films) L227 ANSWER 59 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN 1981:31710 HCAPLUS <<LOGINID::20060124>> ACCESSION NUMBER: DOCUMENT NUMBER: 94:31710 TITLE: Release agents for adhesive tapes PATENT ASSIGNEE(S): Daikin Kogyo Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp. CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 55104310	A2	19800809	JP 1979-11718	1979
JP 62029472 PRIORITY APPLN. INFO.:	B4	19870626	JP 1979-11718 A	0203
				1979 0203

```
AR
     Copolymers derived from polymerizable unsatd. compds. containing C1-21
     perfluoroalkyl groups, methacrylic acid (I), and hydroxyalkyl
     (meth) acrylates are useful as release agents for pressure
     -sensitive adhesive tapes. Thus, a composition of 5:3:1
     mixture of FC(CF3)2(CF2)nCH2CH(OAc)CH2O2CCMe:CH2 (n = 6, 8, and 10)
     75, I 37.5, and 2-hydroxyethyl methacrylate 37.5 parts was polymerized
     in the presence of azobisisobutyronitrile to give a copolymer (II)
     [76108-83-3]. A polypropylene (III) film was coated with a 0.1% II solution in iso-PrOH and dried to form a 20 mg/m2 II
     coating. The peel strengths of a natural rubber-based
     pressure-sensitive adhesive tape to the above
     II-coated film were 810 and 850 g/5 cm before and after 20 h at
     65° and relative humidity 80%, resp., compared with 1420
     and 1420, resp., for a similar bonding to untreated III film.
IT
     76108-83-3
     RL: USES (Uses)
        (release agents, for pressure-sensitive
        adhesive tapes)
RN
     76108-83-3 HCAPLUS
     2-Propenoic acid, 2-methyl-, 2-(acetyloxy)-
CN
     4,4,5,5,6,6,7,7,8,8,9,9,10,11,11,11-hexadecafluoro-10-
     (trifluoromethyl)undecyl ester, polymer with 2-(acetyloxy)-
     4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,13,13,13-eicosafluoro-12-
     (trifluoromethyl)tridecyl 2-methyl-2-propenoate,
     2-(acetyloxy)-4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,1
     5,15,15-tetracosafluoro-14-(trifluoromethyl)pentadecyl
```

2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and

2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CRN 65913-79-3 CMF C22 H13 F27 O4

CM 2

CRN 65913-78-2 CMF C20 H13 F23 O4

CM 3

CRN 65913-77-1 CMF C18 H13 F19 O4

CM 4

CRN 868-77-9 CMF C6 H10 O3

CM 5

CRN 79-41-4 CMF C4 H6 O2

```
CH<sub>2</sub>
Me-C-CO2H
     C08F220-24; C08F220-28; C08F220-38
IC
CC
     37-2 (Plastics Fabrication and Uses)
IT
     Parting materials
        (fluoroalkyl group-containing acrylic polymers, for
        pressure-sensitive adhesive tapes)
ΙT
     Acrylic polymers, uses and miscellaneous
     RL: USES (Uses)
        (fluoroalkyl group-containing, release agents, for pressure
        -sensitive adhesive tapes)
ΙT
     Adhesive tapes
        (pressure-sensitive, release agents for, fluoroalkyl
        group-containing acrylic polymers as)
IT
     76108-83-3
     RL: USES (Uses)
        (release agents, for pressure-sensitive
        adhesive tapes)
```

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